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The Regulation of Genetic Testing in the Workplace — A Legislative Proposal

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I. INTRODUCTION

The industrial revolution of the twentieth century is in fact a chemical revolution with an estimated fifty-five thousand chemicals¹ utilized in the workplace. While not all of these pose a threat to workers' health, society's knowledge of those that are harmful is increasing rapidly.² Concern over the health hazards associated with chemical exposure in the work environment has been brought into sharp focus by the recent barrage of cases concerning worker exposure to asbestos,³ the harbinger of the deadly cancer mesothelioma.

Concurrent with the chemical revolution have been important advances made in the field of genetic engineering which now enable scientists to better identify which genetic and environmental factors in combination produce which illnesses.⁴ A natural application of such scientific advances would appear to be in the workplace where employees in a number of industries are being exposed to an increasing array of chemicals on a daily basis.⁵ A simple blood test would enable scientists to identify which workers are at greater risk from exposure to certain toxins and alert such workers to the potential harm.⁶ The giving of genetic tests⁷ is far easier, how-

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1. *Genetic Screening in the Workplace: Hearings before the Subcomm. on Investigation and Oversight of the House Comm. on Science and Technology*, 97th Cong., 2nd Sess. 1 (Oct. 1982).

2. *Id.*

3. See, e.g., *Harville v. Johns-Manville Prods. Corp.*, 731 F.2d 775 (11th Cir. 1984); *Jackson v. Johns-Manville Sales Corp.*, 727 F.2d 506 (5th Cir. 1984); *In re Johns-Manville Asbestosis Cases*, 511 F. Supp. 1229 (N.D. Ill. 1981); *Elmore v. Owens-Illinois, Inc.*, 673 S.W.2d 434 (Mo. 1984). There are an estimated three hundred cases filed against Johns-Manville Corporation alone over hazardous exposure to asbestos.

4. See generally Z. HARSANYI & R. HUTTON, *GENETIC PROPHECY: BEYOND THE DOUBLE HELIX* (1981); Reinhardt, *Chemical Hypersusceptibility*, 20 J. OCCUP. MED. 319 (May 1978); Stokinger & Scheel, *Hypersusceptibility and Genetic Problems in Occupational Medicine—A Consensus Report*, 153 OCCUP. MED. 564 (1973).

5. OFFICE OF TECHNOLOGY ASSESSMENT, 98TH CONG., 1ST SESS., *THE ROLE OF GENETIC TESTING IN THE PREVENTION OF OCCUPATIONAL DISEASE* 24 (Comm. Print 1983) [hereinafter cited as REPORT]. The Office of Technology Assessment undertook this study at the request of the House Committee on Science and Technology. The Report analyzes the extent of genetic testing, its technology, and its social, legal, ethical, and economic implications. A study conducted by the National Institute of Occupational Safety and Health estimates that 361 million workers were exposed to chemicals in the workplace and that 8.9 million workers were exposed to chemicals which we now know are harmful. *Id.* at 24. The number one health priority according to the Occupational Safety and Health Administration is exposure to chemicals. *Id.*

6. *Id.* at 57.

7. "Genetic testing of employee populations is a basic method for identifying individuals or groups with particular inherited traits or evidence of genetic damage in certain cells who may be at increased risk for disease. It is the application of tests to a group of apparently well persons in order to identify those who have a high probability of developing a disease so that prevention or early treatment is possible." *Id.*

ever, than the decision of what actions to take as a result of the tests. The practice of genetic testing in the workplace raises serious ethical and legal concerns which have recently been addressed by journalists,⁸ Congress,⁹ scientists,¹⁰ ethicists,¹¹ and lawyers.¹²

The practice of testing workers to determine hypersusceptibility¹³ to toxins¹⁴ in the workplace first received national attention in a series of articles in the New York Times in 1980.¹⁵ Since then, a survey of the use of genetic testing in the workplace has been conducted by the Congressional Office of Technology Assessment (OTA).¹⁶ After this survey, hearings were held by the House Science and Technology Committee.¹⁷ In April of 1983 OTA published its report.¹⁸ The results of the survey indicated that although genetic testing is currently being used by only six companies, fifty-five companies stated that they were considering using it in the future.¹⁹

The use of genetic testing in the workplace has raised concern among various groups. Some researchers question the probative value²⁰ of such tests,²¹ while union

8. See, e.g., Severo, *Dispute Arises over Dow Studies on Genetic Damage in Workers*, N.Y. Times, Feb. 5, 1980, at A1, col. 1 [hereinafter cited as Severo I]; Severo, *Screening of Blacks by Du Pont Sharpens Debate on Gene Tests*, N.Y. Times, Feb. 4, 1980, at A1, col. 5 [hereinafter cited as Severo II]; Severo, *Genetic Tests by Industry Raise Questions on Rights of Workers*, N.Y. Times, Feb. 3, 1980, at A1, col. 1 [hereinafter cited as Severo III]; Hiltz, *More Employers Testing Workers' Genes*, Wash. Post, May 6, 1983, at A5, col. 1.

9. The United States Congressional Office of Technology Assessment conducted a study in 1982 of workplace genetic screening which surveyed the five hundred largest United States industrial companies, the fifty largest private utilities, and eleven unions. Although only six of the 366 respondents said they were using genetic screening, fifty-five stated they anticipated using such testing in the next five years. REPORT, *supra* note 5, at 31.

10. See, e.g., Omenn, *Predictive Identification of Hypersusceptible Individuals*, 24 J. OCCUP. MED. 369 (May 1982); Reinhardt, *supra* note 4; Stokinger & Scheel, *supra* note 4; Wright, *Panel Discussion: Role of the Knowledge of High Risk Groups in Occupational Health Policies and Practices*, 29 ENVTL. HEALTH PERSP. 143 (1979).

11. See, e.g., Murray, *Warning: Screening Workers for Genetic Risk*, 13 HASTINGS CENTER REP. 5 (Feb. 1983); Sheridan, *Genetic Screening: Its Promise and Peril*, 53 J. OCCUP. HAZARDS 75 (Apr. 1983); Sheridan, *Reproductive Hazards: Probing the Ethical Issues*, 54 J. OCCUP. HAZARDS 72 (May 1983).

12. See, e.g., Diamond, *Genetic Testing in Employment Situations—A Question of Worker Rights*, 4 J. LEGAL MED. 231 (1983); Goodrich, *Are Your Genes Right for Your Job?*, 3 CAL. LAW. 24 (May 1983); McGarity & Schroeder, *Risk-Oriented Employment Screening*, 59 TEX. L. REV. 999 (1981); Rothstein, *Employee Selection Based on Susceptibility to Occupational Illness*, 81 MICH. L. REV. 1379 (1983); Sanchez, *Genetic Testing: The Genesis of A New Era In Employee Protection*, 11 W. ST. U.L. REV. 199 (1984); Note, *Genetic Testing in Employment: Employee Protection or Threat?*, 15 SUFFOLK U.L. REV. 1187 (1981).

13. "Hypersusceptible" describes those persons who are more sensitive to toxic exposure than the average person. N. ASHFORD, *CRISIS IN THE WORKPLACE* 118 (1976).

14. "Toxins" describes poisonous, carcinogenic, mutagenic, or teratogenic substances. *Id.* at 78.

15. See *supra* note 8.

16. See *supra* note 9.

17. See *Genetic Screening in the Workplace: Hearings before the Subcomm. on Investigations and Oversight of the House Comm. on Science and Technology*, 97th Cong., 2nd Sess. (Oct. 1982) [hereinafter cited as *Hearings* (Oct. 1982)]; *Genetic Screening of Workers: Hearings before the Subcomm. on Investigations and Oversight of the House Comm. on Science and Technology*, 97th Cong., 2nd Sess. (June 1982) [hereinafter cited as *Hearings* (June 1982)]; *Genetic Screening and the Handling of High-Risk Groups in the Workplace: Hearings before the Subcomm. on Investigations and Oversight of the House Comm. on Science and Technology*, 97th Cong., 1st Sess. (Oct. 1981) [hereinafter cited as *Hearings* (Oct. 1981)].

18. See REPORT, *supra* note 5.

19. *Id.* at 9, 34.

20. A number of genetic tests are currently being used by industry: sickle cell, G-6-PD, SAT, methemoglobin reductus, and red blood cell/serum disorder. In advocating the enactment of legislation to regulate the use of genetic testing, this Article focuses on those tests which are known to have probative value. See *infra* text accompanying notes 65-71 for a discussion of such tests. In order for a test to have a probative value, it must be both reliable and valid. Reliability of a test addresses the issue of repeated application with consistent results, while validity addresses the issue of accuracy in measuring what the test is intended to measure. Diamond, *supra* note 12, at 235. The issue of probative value of a test in identifying which tests may be used in the employment sector cannot be overemphasized, particularly

leaders have expressed concern regarding the potential for improper use of genetic test results.²² In particular, union officials have voiced the opinion that the process is subject to gross abuse and raises fundamental legal questions concerning the employer's right to use and disseminate the results of such tests.²³ For example, may an employer refuse to hire someone because he has a greater potential of contracting a job-related disease than another? Critics of genetic testing have two central concerns: first, that genetic testing provides employers with an excuse for not making greater efforts to clean up the workplace environment;²⁴ and second, that "the same information that may help an employee decide to avoid a toxic substance may also be used by an employer to force a worker out of a job."²⁵ On the other hand, advocates of genetic testing believe that it has the potential to play an important role in the prevention of occupational disease.²⁶ The basis of this belief is that, although the workplace cannot be made risk-free,

[b]y identifying workers who may be at increased risk of disease because of past or potential exposure to hazardous substances, preventive measures could be taken by the company or by the workers themselves. In addition to the direct benefits associated with improved health, there could be indirect benefits such as reduction in the costs to employers, employees, and society associated with occupational illness.²⁷

Several articles have been written which address one or more of the legal issues surrounding genetic testing and which recommend guidelines for its application.²⁸ Although there have been no cases reported in which an employee alleged discrimination in employment on the basis of his genetic make-up,²⁹ the spectre raised by genetic testing is awesome: "[i]f we learn to predict which individuals are more likely

if the tests result in the refusal to hire or removal of a hypersusceptible person from a toxic environment. For a more detailed discussion of the validity and reliability of such tests, see Diamond, *supra* note 12, at 234-40; Rothstein, *supra* note 12, at 1416-24; Stokinger & Scheel, *supra* note 4, at 568-73.

21. See, e.g., *Hearings* (June 1982), *supra* note 17, at 49-62 (testimony of Dr. Kenneth B. Miller, Medical Director, Workers' Institute for Safety and Health) [hereinafter referred to as Dr. Kenneth B. Miller].

22. See, e.g., *id.* at 107-11 (testimony of James English, Associate General Counsel, United Steelworkers of America) [hereinafter referred to as James English, Esq.].

23. *Id.*

24. Holden, *Looking at Genes in the Workplace*, 217 Sci. 336 (July 23, 1982).

25. Z. HARSANYI & R. HUTTON, *supra* note 4, at 118. See also *Hearings* (June 1982), *supra* note 17, at 107.

26. See *Hearings* (June 1982), *supra* note 17, at 3-6 (testimony of Dr. Gretchen S. Kolsrud, Researcher, Biological Applications Program, Office of Technology Assessment, Congress of the United States) [hereinafter referred to as Gretchen S. Kolsrud].

27. *Id.* at 3.

28. See *supra* note 12.

29. There have been, however, several cases brought by women under Title VII alleging sex discrimination on the theory that they were denied access to certain higher paying jobs because the jobs involved exposure to substances potentially harmful to a fetus. See, e.g., *Wright v. Olin Corp.*, 697 F.2d 1172 (4th Cir. 1982) (female employees brought suit under Title VII alleging that the company's fetal vulnerability program discriminated against them); *Zuniga v. Kleberg County Hosp.*, 692 F.2d 986 (5th Cir. 1982) (hospital X-ray technician filed a Title VII action alleging that she was discriminated against when discharged after becoming pregnant). A number of articles which address the legal rights of women who are discriminated against in the workplace because of employer concern over fetal injury have been written. See, e.g., Vanderwaardt, *Resolving the Conflict Between Hazardous Substances in the Workplace and Equal Employment Opportunity*, 21 AM. BUS. L.J. 157 (1983); Note, *Employment Rights of Women in the Toxic Workplace*, 65 CALIF. L. REV. 1113 (1977); Note, *Exclusionary Employment Practices in Hazardous Industries: Protection or Discrimination?*, 5 COLUM. J. ENVTL. L. 97 (1978) [hereinafter cited as Note, *Exclusionary Employment Practices*]; Note, *Birth Defects Caused by Parental Exposure to Workplace Hazards: The Interface of Title VII with OSHA and Tort Law*, 12 J. LAW REF. 237 (1979) [hereinafter cited as Note, *Birth Defects and the Workplace*].

to be harmed by exposure to certain substances, it has potential to serve as a marvelous tool to protect the health of workers, or as a terrible vehicle for invidious discrimination."³⁰ The purpose of this Article is to identify the fundamental concerns posed by the practice of genetic testing to both the employer and the employee and to propose a legislative solution to accommodate these concerns.

This Article will begin with a review of the state of the art of genetic testing and the results of the OTA study. Next, the Article will address employee and employer concerns with the practice of genetic testing and the inadequacies of current legislation and the common law to deal with these concerns. To put the problem in perspective, consider the following fact situation. John Doe is a healthy young black man who applies for a job at a chemical plant. He is given a routine physical examination by the company doctor in connection with his preemployment application. Included in the examination is a blood test. The use of this test is not explained to John Doe, nor does he inquire about it. Several weeks later he receives a letter in the mail thanking him for his interest and stating that another candidate more suitable for the job was found. Unbeknown to John Doe, he is a carrier of a sickle cell trait. The chemical company has reliable information obtained from reliable genetic tests performed on his blood indicating that John Doe would be ten times more likely to develop sickle cell anemia because of his genetic make-up. There were other applicants qualified for the job, and the company decided not to hire John Doe because of the risk of his contracting an occupational illness. The decision was not merely altruistic, but was based on economics and the uncertainty concerning the employer's duties to such an employee.

The above fact situation raises a number of concerns faced by both the applicant and the employer. If the applicant were given the basis for his rejection he surely would raise questions concerning the employer's right to discriminate in this fashion. He also might be concerned with the disclosure of such information to other companies in the industry because such disclosure might foreclose job opportunities in his given field of expertise. Furthermore, John Doe might have wanted this genetic trait disclosed to him so that he could make informed lifestyle decisions including whether to continue working in the chemical industry. Alternatively, he might have been willing to accept the risk of contracting sickle cell anemia because he is a risk taker.

In turn, the employer is concerned over issues of liability in connection with such tests. Currently, the law establishes no incentive for employers to test or to reveal the nature of the test or the results. Does the employer have a duty to disclose results of the test? Does he have the right to foreclose job opportunities to applicants on the chance that the employee might contract an occupational disease?

The concerns of an employee include discriminatory application of genetic testing under Title VII, the Rehabilitation Act, and state law, and privacy concerns under constitutional and common law. Following discussion of these employee

30. *Hearings* (June 1982), *supra* note 17, at 2 (testimony of Representative Gore, Chairman, Subcommittee on Investigations and Oversight [hereinafter referred to as Chairman Gore]).

considerations, the two major concerns of the employer will be addressed. These concerns are the duty to test under common law and the effects of genetic testing on employer compliance with the Occupational Safety and Health Act (OSHA). This Article will set forth what legislation in this area should accomplish and will conclude by suggesting a legislative proposal which addresses the concerns surrounding the practice of genetic testing.

II. GENETIC TESTING—A BACKGROUND

One survey indicates that occupational illness cost the United States economy more than 850,000 workdays in 1981.³¹ It has been estimated that exposure to hazardous substances in the workplace plays a role in five percent of all cancers.³² Without question, occupational illness has a significant effect on the economy, not to mention the devastating impact it has upon the affected worker and his family. A problem of such scope and importance demands serious consideration of all reasonable approaches to reducing the incidence of occupational illness. One such approach is suggested by the following example: Although hundreds of thousands of workers are exposed to cotton dust in textile factories, only a small percentage of these actually contract the lung disease *byssinosis*. Is it possible to identify those workers most likely to contract this illness and protect them by not hiring them for such work? As early as 1938 there was conjecture that knowledge of hereditary traits was possibly a key to protecting hypersusceptible workers from certain illnesses:

The majority of potters do not die of bronchitis. It is quite possible that if we really understood the causation of this disease we should find out that only a fraction of potters are of a constitution which renders them liable to it. If so, we could eliminate potters' bronchitis by regulating entrants into the potters' industry who are congenitally exposed to it.³³

It was not until the 1950's that scientists were able to identify a link between genetic make-up and violent reactions to certain drugs, but by 1960 toxicologists had drawn the analogy between drug ingestion and chemical exposures in general.³⁴ The importance of this analogy and its implications for susceptibility evaluation by employers was heralded by two toxicologists, Stokinger and Mountain, in 1963.³⁵ Ten years later Stokinger and another toxicologist, Scheel, published an article that identified five candidates for hypersusceptibility, one of which was the sickle cell trait.³⁶ Notwithstanding these developments, testimony before the Senate Subcommittee on Science and Technology³⁷ and recent publica-

31. REPORT, *supra* note 5, at 5, 23.

32. *Id.* at 23.

33. Murray, *supra* note 11, at 5.

34. *Id.*

35. They suggested that a susceptibility evaluation during the job placement examination would preclude exposing a worker to toxins to which he is hypersusceptible. "This is preventive toxicology in the highest form; no previous single development in toxicology has opened such prospects for the medical supervision of workers." Stokinger & Mountain, *Tests for Hypersusceptibility to Hemolytic Chemicals*, 6 ARCHIVES OF ENVTL. HEALTH 57, 496 (April 1963).

36. Stokinger & Scheel, *supra* note 4.

37. See, e.g., *Hearings* (June 1982), *supra* note 17, at 49 (statement of Dr. Kenneth B. Miller).

tions³⁸ caution that genetic testing for the purpose of screening out the hypersusceptible worker should not routinely be utilized at this time because the validity and reliability of such tests are in doubt.

In October 1981 a House subcommittee chaired by Representative Gore began an inquiry into the issues raised by genetic testing in occupational settings.³⁹ At the time of these initial hearings the consensus was that the art of genetic testing was in its embryonic stages and that validated and reasonably predictive testing was still years away.⁴⁰ However, because there was a suspicion that genetic testing was currently being used by industry for a variety of purposes, the subcommittee felt it appropriate to conduct a study to determine the extent of such practices.⁴¹ There were several purposes of the survey: to determine the frequency of past, present, and future genetic testing; to identify which tests were used and under what circumstances; and to determine how the results of the test were used.⁴² Questionnaires were mailed to the five hundred largest industrial companies, the fifty largest private utilities, and the eleven major unions representing the largest number of employees in these companies.⁴³ Three hundred sixty-six organizations answered the questionnaires representing a sixty-five percent response rate.⁴⁴ Six (1.6 percent) of the respondents stated they were currently using genetic testing; seventeen (4.6 percent) of the respondents stated they had used genetic testing in the last twelve years; and fifty-nine (16.1 percent) of the respondents answered that they might use genetic testing in the future.⁴⁵ Among the group who are currently testing, two are in the chemical industry, two are utilities, and two are in the electronics industry.⁴⁶ Half of those who tested in the past are chemical companies.⁴⁷ The companies were asked about the circumstances under which the tests were administered (routinely, for research, or for other purposes). The responding companies which engaged in such testing said that it was done routinely.⁴⁸ Testing for sickle cell traits was generally based on ethnic background, while selection of employees for other types of tests was made according to their jobs.⁴⁹ No respondent reported basing a genetic test on an employee's sex.⁵⁰

38. See, e.g., REPORT, *supra* note 5, at 57-61 (genetic tests at this date are not very reliable); Omenn, *supra* note 10, at 373 (validity of such practices questioned); Ressnick, Letters to the Editor, 15 J. OCCUP. MED. 858, 860 (November 1973) (only limited evidence available to prove validity of genetic testing); Severo II, *supra* note 8, at A13, cols. 4-5 (several physicians have concluded that genetic testing is not valuable except as a research tool). But see Reinhardt, *supra* note 4, at 320 (genetic testing is useful to identify those hypersusceptible to certain substances); Stokinger & Scheel, *supra* note 4, at 564 (genetic testing is useful in identifying hypersusceptibility for the worker's own personal benefit).

39. See *supra* note 17.

40. See generally Hearings (Oct. 1981), *supra* note 17; Sheridan, *Genetic Screening: Its Promise and Peril*, *supra* note 11.

41. See generally Hearings (Oct. 1981), *supra* note 17; Sheridan, *Genetic Screening: Its Promise and Peril*, *supra* note 11.

42. Hearings (June 1982), *supra* note 17, at 8-9 (testimony of Gretchen S. Kolsrud).

43. *Id.* at 11.

44. *Id.* at 5.

45. *Id.*

46. *Id.*

47. *Id.*

48. *Id.*

49. *Id.*

50. *Id.*

Responses concerning the use of genetic testing results varied greatly, ranging from actions involving employees to actions taken to change or discontinue certain products.⁵¹ Of the eighteen companies which reported taking action, eight reported that they informed the employee of a potential problem, five reported transferring the hypersusceptible employee, and two suggested the employee seek another job.⁵² No employer reported dismissing an employee because of his or her hypersusceptibility.⁵³

Because of the evidence of current use and future interest in genetic testing,⁵⁴ OTA conducted further research to assess the technology and its implications. Their conclusions and recommendations were published in the April 1983 report, "The Role of Genetic Testing in the Prevention of Occupational Disease."⁵⁵ The Report concluded that "[n]one of the genetic tests evaluated by OTA meets established scientific criteria for routine use in an occupational setting. However, there is enough suggestive evidence to merit further research."⁵⁶ Moreover, the evidence that genetic testing currently occurs raises serious legal questions relating to responsibility for workplace safety and employee rights.

Genetic testing has two different applications in the workplace setting: cytogenetic testing (genetic monitoring)⁵⁷ and biochemical testing (genetic screening).⁵⁸ The former involves periodic examinations of workers to determine whether a worker's genetic make-up is changing during the course of his employment and to monitor exposure to toxic chemicals or radiation.⁵⁹ Use of this form of testing would be done to identify those workers who are at an increased risk of developing diseases such as cancer. It can serve as an early warning system by indicating that the degree of exposure to specific health hazards is too high or that an unsuspected hazard poses a health threat.⁶⁰ Genetic screening, on the other hand, involves a one-time test to determine whether a worker carries a particular trait that might render him more susceptible to hazardous chemicals or radiation. The goal of genetic screening is to identify hypersusceptible workers in order to exclude them from a potentially harmful work environment as a preventive medical practice.⁶¹

Although the issue of genetic testing involves complex social, legal, and political issues, the test itself is extremely simple to perform. Only a small quantity of blood from the employee is needed.⁶² According to testimony before the House Subcommittee on Investigation and Oversight, preemployment physical examinations often requiring a blood sample are administered to approximately half of the nation's

51. REPORT, *supra* note 5, at 37.

52. *Id.*

53. *Id.* at 38.

54. See REPORT, *supra* note 5, at 33-39.

55. REPORT, *supra* note 5.

56. *Id.* at 9-10.

57. For a thorough explanation of the precepts involved in cytogenetic monitoring, see REPORT, *supra* note 5, at 67-88.

58. For a detailed analysis of biochemical testing, see *id.* at 89-101.

59. REPORT, *supra* note 5, at 67.

60. *Id.* at 23.

61. Note, *supra* note 12, at 1191.

62. REPORT, *supra* note 5, at 57.

employees.⁶³ Testimony before the Subcommittee also indicated that little or no regulation exists which defines what medical tests may be performed or what personnel action may be taken as a result of such tests.⁶⁴

Scientists have devised a number of genetic tests to be used by industrial employers to identify genetic abnormalities of employees. Although scientists in occupational medicine have disagreed generally over the validity of genetic testing as proof of hypersusceptibility to occupational disease,⁶⁵ several tests are conceded to have validity. One such test is used to identify the sickle cell trait, an abnormal protein which is found in persons of African, Mediterranean, or Middle-Eastern descent, as well as in approximately eight percent of American blacks.⁶⁶ A second test which is generally recognized as valid identifies a glucose-6-phosphate dehydrogenase (G-6-PD) deficiency which is found in approximately eleven percent of Mediterranean Jews and American blacks.⁶⁷ Evidence suggests that if persons with either of the above deficiencies are exposed to nitro and amino compounds such as benzene or lead, they could suffer adverse effects.⁶⁸ Yet a third reliable test is used to identify people with a serum antitrypsin (SAT) deficiency.⁶⁹ Typically, this deficiency occurs in people of Northern and Central European heritage⁷⁰ and renders them more susceptible to chest ailments.⁷¹ Since a majority of industrial chemicals and fibers in the textile industries give rise to respiratory ailments, such employers, for example, would conceivably want to prescreen prospective employees for SAT deficiency.

Authors have suggested numerous reasons for such testing by employers: general research into occupational illness; requests of employees or unions; the protection of workers; and the avoidance of legal liability for nontesting.⁷² In particular, an employer may engage in such testing to avoid claims subject to workers' compensation.⁷³ These claims may be of two varieties: those which arise in connection with a hypersusceptible worker's degenerative condition over the period of exposure; and those which are latent and may not arise until many years after the period of exposure has ceased.⁷⁴ An employer may test to avoid liability under tort law for negligently

63. *Hearings* (June 1982), *supra* note 17, at 104 (statement of Mark A. Rothstein, Professor of Law, West Virginia University) [hereinafter referred to as Prof. Mark A. Rothstein].

64. *Id.* See also Rothstein, *supra* note 12, at 1428.

65. See *supra* notes 37-38 and accompanying text.

66. Reinhardt, *supra* note 4, at 320; Stokinger & Scheel, *supra* note 4, at 571 (five percent of American blacks have the sickle cell trait.). See also Note, *supra* note 12, at 1192.

67. Stokinger & Scheel, *supra* note 4, at 568 (identifies G-6-PD as prevalent to particular ethnic groups and as the most widespread, clinically important genetic abnormality). See also Note, *supra* note 12, at 1192.

68. See Reinhardt, *supra* note 4, at 320 (persons with G-6-PD deficiency should not be allowed to work with nitro and amino compounds); Stokinger & Scheel, *supra* note 4, at 572 (those with the sickle cell trait face greater health risk if exposed to benzene and lead). See also Note, *supra* note 12, at 1192.

69. Note, *supra* note 12, at 1192.

70. See Reinhardt, *supra* note 4, at 321 (two to five percent of English, Irish, Germans, and French-Belgians have an SAT deficiency); Stokinger & Scheel, *supra* note 4, at 566 (Central Europeans represent majority of those with SAT deficiency); Note, *supra* note 12, at 1192-93; Severo III, *supra* note 8, at A36, col. 2.

71. Reinhardt, *supra* note 4, at 321; Note, *supra* note 12, at 1193.

72. See *Hearings* (June 1982), *supra* note 17, at 23 (Table VI); Diamond, *supra* note 12, at 233 n.12; McGarity & Schroeder, *supra* note 12, at 1001.

73. Note, *supra* note 12, at 1194-95.

74. *Id.*

exposing a worker to toxins without warning him of their known danger or for the birth defects of a child resulting from parental exposure to toxic substances.⁷⁵

Employer applications of genetic testing raise issues regarding employee rights. Concern has been expressed that genetic screening will be used to limit access by hypersusceptible job applicants to a number of jobs and promotions wherever there is a risk of toxic exposure.⁷⁶ Such an application might result in the relegation of hypersusceptible employees to the lower paying jobs or even to unemployment because of their genetic make-up.⁷⁷ Similarly, a hypersusceptible employee may suffer salary cuts when his hypersusceptibility is discovered and he is transferred to a nontoxic work area.⁷⁸ Finally, it is suggested that employers might use genetic testing, screening in particular, to obviate the requirement under OSHA to make the workplace safe "for every man and woman."⁷⁹ The spectre raised by the use of genetic testing in the workplace is thus multifaceted.⁸⁰ In furtherance of identifying the proper scope of proposed legislation regulating genetic testing, the next section of this Article will identify employee concerns about such practices.

III. EMPLOYEE CONCERNS OVER GENETIC TESTING IN THE WORKPLACE

As expressed in the congressional hearings, one of the primary concerns of employee representatives is that genetic testing will be used to discriminate against various subcategories of the workforce through exclusionary practices.⁸¹ Although the OTA survey results conclude that no employer who tested for genetic abnormalities had based a hiring decision on the results of such a test,⁸² there is clearly an economic incentive to do so.⁸³ In examining our current legal framework, an employee who suspects that he has been discriminated against on the basis of genetics may pursue several avenues: a cause of action under Title VII of the Civil Rights Act

75. *Id.* at 1196.

76. *Id.* at 1193.

77. *Id.*

78. *See, e.g.,* Wright v. Olin Corp., 697 F.2d 1172 (4th Cir. 1982). A fetal vulnerability program initiated by Olin Corporation several years ago precluded women of childbearing age from certain jobs classified as involving possible exposure to harmful chemicals dangerous to a fetus. Women barred from higher paying jobs by the fetal vulnerability program subsequently brought suit against their employer under Title VII alleging discrimination. *See infra* notes 144-49 and accompanying text.

79. Goodrich, *supra* note 12, at 28.

80. While the focus of this Article will be weighted more heavily on genetic screening, genetic monitoring raises many of the same legal questions, thus reference shall be made generally to both such practices by use of the term genetic testing. Where relevant, the term "genetic screening" will be used to apply to biochemical testing (*see supra* note 58 and accompanying text), and the term "genetic monitoring" will be used to apply to cytogenetic testing (*see supra* note 57 and accompanying text).

81. Such concern was expressed in a statement by James English, Associate General Counsel of the United Steelworkers of America: "We have a genuine concern that the rapid development of knowledge in this area [genetic testing] may lead to the misuse of the information, particularly by excluding from workplace and from jobs persons who are otherwise qualified to perform work." *Hearings* (June 1982), *supra* note 17, at 107 (testimony of James English, Esq.).

82. REPORT, *supra* note 5, at 37-38.

83. As aptly stated by Representative Gore, Chairman of the Subcommittee on Investigation and Oversight of the Committee on Science and Technology, "[t]he increasing costs of making improvements in the workplace environment and the financial burdens posed by workers' compensation and similar statutes have provided many industries with a strong economic incentive to engage in preemployment screening." *Hearings* (Oct. 1981), *supra* note 17, at 1 (testimony of Representative Gore).

of 1964,⁸⁴ a cause of action under Sections 503 and 504 of the Rehabilitation Act of 1973,⁸⁵ or a cause of action under various state discrimination laws.⁸⁶ In furtherance of identifying the need for and content of specific legislation addressing the use of genetic testing by employers, this section will briefly analyze the anticipated outcome of any such litigation under the two federal antidiscrimination statutes and under various state statutes. This section will also analyze employee concerns involving rights of privacy, confidentiality, and the right to be told of the presence of toxins in the workplace.

A. Title VII

In enacting Title VII Congress' goal was to remove all "artificial, arbitrary, and unnecessary barriers to employment when the barriers operate invidiously to discriminate on the basis of racial or other impermissible classification."⁸⁷ Specifically, Title VII prohibits discrimination in employment on the basis of race, color, religion, sex, or national origin.⁸⁸ The intent of Title VII is to prohibit employment practices which classify or segregate employees on the basis of one of the above mentioned categories.⁸⁹ The Act prohibits both overt discrimination (disparate treatment) and employment policies which, although fair in form, are discriminatory in effect (disparate impact).⁹⁰ In theory, Title VII promotes equal employment opportunity regardless of genetic make-up. Genetic discrimination⁹¹ appears to fall under the prohibition of Title VII in three categories: race, national origin, and sex.⁹²

While a grievance based on genetic discrimination represents a case of first impression, analogies may be drawn to a developing body of cases⁹³ addressing the

84. Civil Rights Act of 1964 (Title VII), Pub. L. No. 88-352, 78 Stat. 253 (codified at 42 U.S.C. §§ 2000e-c17 (1976 & Supp. 1979)) [hereinafter referred to as Title VII].

85. 29 U.S.C. §§ 701-794 (1976 & Supp. III 1979).

86. For a comprehensive list of the 41 states and the District of Columbia which have enacted laws prohibiting discrimination on the basis of a handicap in employment, see Rothstein, *supra* note 12, at 1437 n.392.

87. *Griggs v. Duke Power Co.*, 401 U.S. 424, 431 (1971).

88. 42 U.S.C. § 2000e-2 (1976 & Supp. 1979). Section 703(a) of Title VII makes it unlawful for an employer: (1) to fail or refuse to hire or to discharge any individual, or otherwise to discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, sex, or national origin; or (2) to limit, segregate, or classify his employees or applicants for employment in any way which would deprive or tend to deprive any individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, sex, or national origin.

Id.

89. *Id.* See also *DeSantis v. Pacific Tel. & Tel. Co.*, 608 F.2d 327, 330 (9th Cir. 1979) (one of the purposes of Title VII is to prohibit discrimination against blacks).

90. *Pullman-Standard v. Swint*, 456 U.S. 273, 276 (1982); *Griggs v. Duke Power Co.*, 401 U.S. 424, 431 (1971).

91. Congress left the definition of the term "discrimination" as used in Title VII to the discretion of the courts. The term has been judicially interpreted as "a failure to treat all persons equally where no reasonable distinction can be found between those favored and those not favored." *Baker v. California Land Title Co.*, 349 F. Supp. 235, 238 (C.D. Cal. 1972).

92. Responses to the OTA Survey showed that employees were selected for sickle cell testing on the basis of their race or national origin and on the basis of job category for other types of tests. No employer, however, reported basing a test on an employee's sex. REPORT, *supra* note 5, at 34-36 (Table 7). As will be discussed, genetic discrimination based on blood tests will most often affect women because employers perceive them to be more hypersusceptible to toxins in the workplace than their male counterparts. See *infra* note 99. Under these circumstances, the appropriate cause of action would be one of disparate treatment. See Rothstein, *supra* note 12, at 1457.

93. See *infra* notes 144-49 and accompanying text (regarding Title VII application to sex discrimination based on

issue of sex discrimination based on an employer's policy of excluding fertile women from jobs deemed harmful to the fetus. Similar to the approaches taken in the fetal cases, a discrimination case may be analyzed under three theories: facial discrimination, pretextual discrimination (both subsumed under the name "disparate treatment"), and disparate impact.⁹⁴ Each theory will be reviewed in terms of establishing a prima facie case and recognizing the defenses an employer may raise to counteract a charge of discrimination based on genetic testing.

1. Facial Discrimination and the BFOQ Defense

The first theory on which a plaintiff may base a claim for discrimination based on genetic testing is the disparate treatment model of facial discrimination. Title VII "proscribes intentional employment practices that result in disparate treatment among those who are similarly situated."⁹⁵ To establish a prima facie case of discrimination under this model, plaintiff must prove that the discrimination was purposeful or intentional or show proof of actions from which such discrimination can be inferred.⁹⁶ Such proof may be evidenced by the following criteria: 1) plaintiff was a member of a protected class; 2) plaintiff applied and was qualified for a job for which the employer was seeking applicants; 3) despite being qualified, plaintiff was rejected; and 4) the job remained open after his rejection.⁹⁷ A member of a protected class who was denied employment because of hypersusceptibility can establish a prima facie case by proving that the genetic test administered resulted in higher rejection rates for the member's class and the use of the test was motivated by bad faith or animus

the exclusion of fertile women from certain jobs). The sex-based discrimination cases are addressed herein primarily because they pose the most analogous issues to genetic testing provided to date by case law.

94. See generally *Hayes v. Shelby Memorial Hosp.*, 726 F.2d 1543 (11th Cir. 1984); *Williams, Firing the Women to Protect the Fetus: The Reconciliation of Fetal Protection with Employment Opportunity Goals Under Title VII*, 69 Geo. L.J. 641, 673-82 (1981).

95. Note, *supra* note 12, at 1199. See also *International Bhd. of Teamsters v. United States*, 431 U.S. 324, 335 n.15 (1977).

96. See *Furnco Constr. Corp. v. Waters*, 438 U.S. 567, 580 (1978); *White v. City of San Diego*, 605 F.2d 455, 458 (9th Cir. 1979). The burden of establishing a case of disparate treatment requires that the plaintiff provide direct or circumstantial proof of discriminatory motive. *International Bhd. of Teamsters v. United States*, 431 U.S. 324, 335 n.15 (1977); *Jackson v. Seaboard Coast Line R.R. Co.*, 678 F.2d 992, 1014 (11th Cir. 1982). Statistics may be used as part of the circumstantial evidence to support such an inference. The statistics must clearly show the discrepancy in treatment of the protected class, thus their usefulness "depends on all of the surrounding facts and circumstances." *International Bhd. of Teamsters v. United States*, 431 U.S. 324, 340 (1977). It is clear, however, that if the plaintiff presents only the statistics without proof of discriminatory intent, the case becomes one of disparate impact.

97. *McDonnell Douglas Corp. v. Green*, 411 U.S. 792, 802 (1973). However, the nature and purpose of Title VII require that the *McDonnell Douglas* test remain flexible. "What must be shown to support an inference that the plaintiff was discriminated against depends on the facts of each case." *Spaulding v. Univ. of Washington*, 740 F.2d 686, 700 (9th Cir. 1984); *Peters v. Lieualen*, 693 F.2d 966, 969 (9th Cir. 1982). Furthermore, "[i]n the rare situation in which the evidence establishes that an employer openly discriminates against an individual it is not necessary to apply the mechanical formula of *McDonnell Douglas* to establish an inference of intentional discrimination; the showing has already been made directly." *Ramirez v. Sloss*, 615 F.2d 163, 168 (5th Cir. 1980) (footnote omitted); accord *Texas Dep't of Community Affairs v. Burdine*, 450 U.S. 248, 253 n.6 (1981) (*McDonnell Douglas* formula is not inflexible but may vary according to the facts of each case); *McDonnell Douglas Corp. v. Green*, 411 U.S. 792, 802 n.13 (1973) (the four elements not necessarily applicable in all regards to different fact situations). See also *Lee v. Conecuh County Bd. of Educ.*, 634 F.2d 959, 962 (5th Cir. 1981) (*McDonnell Douglas* formula is only one method to set forth a prima facie case); *Gunter v. Iowa State Men's Reformatory*, 612 F.2d 1079, 1085-86 (8th Cir.) (actual admission of discrimination on the basis of sex suffices to prove a prima facie showing of discrimination), *cert. denied*, 446 U.S. 966 (1980).

against the protected class.⁹⁸ It thus appears clear that job applicants or employees who have been discriminated against on the basis of the results of a genetic test may maintain a cause of action pursuant to the facial discrimination model of disparate treatment under Title VII.⁹⁹ Establishment of intent to discriminate is a key element of this cause of action.¹⁰⁰

Even though the employee has established a *prima facie* case of disparate treatment, the employer may nonetheless justify discrimination on the basis of a *bona fide* occupational qualification (bfoq). Title VII specifically provides that an employer may base a hiring decision on sex, religion, or national origin (but never race or color) when that characteristic is reasonably necessary to the operation of the employer's business.¹⁰¹ However, the relevance of this defense to employers when confronted with allegations of discrimination on the basis of genetic test results is questionable. Despite the fact that the language of Title VII specifically bases the exception on sex, religion, or national origin, to date section 703(e) has been narrowly construed to apply only to the general prohibition of discrimination on the basis of sex.¹⁰²

98. Note, *supra* note 12, at 1199.

99. Rothstein states that disparate treatment based on medical tests is most likely to affect women and suggests that their real or perceived susceptibility results in certain reactions from employers: 1) the imposition of unique conditions on women only; 2) a conclusion that women have a greater susceptibility to toxins than men; and 3) the belief that certain subcategories of women when combined with workplace exposure produces a greater evidence of occupational illness in those women. An example of the first category is requiring certain tests of women not required of men. An example of the second category is separate treatment of all women employees based on scientific data that suggests, for example, that they live longer and therefore should contribute more to pensions. An example of the third category is what Rothstein calls "sex plus" discrimination: disparate treatment of a subclass of one sex, such as a policy to exclude pregnant women from certain hazardous jobs. Rothstein, *supra* note 12, at 1457-58 and cases cited therein. It appears that these categories are not necessarily limited to women, but also describe possible discriminatory treatment under genetic testing practices. Clearly, the imposition of a certain genetic test on a certain subcategory of employees (those of Eurasian descent, for example) constitutes a *prima facie* case of disparate treatment as does the exclusion of a subcategory of employees (based on national origin, for example) because of scientific evidence of their higher susceptibility to certain chemicals and the separate treatment of blacks who have a sickle cell trait from those who do not.

100. *International Bhd. of Teamsters v. United States*, 431 U.S. 324, 335 n.15 (1977). Because it is a tremendous burden on the employee to prove an employer's discriminatory intent, the courts allow the introduction of statistical evidence to infer a discriminatory intent on the part of the employer. Note, *supra* note 12, at 1200.

101. Section 703(e)(1) states:

Notwithstanding any other provision of this subchapter, (1) it shall not be an unlawful employment practice for an employer to hire and employ employees, . . . on the basis of his religion, sex, or national origin in those certain instances where religion, sex, or national origin is a *bona fide occupational qualification* reasonably necessary to the normal operation of that particular business or enterprise.

42 U.S.C. § 2000e-2(e) (1976 and Supp. 1979) (emphasis added). The language "necessary to the normal operation of that particular business" has been interpreted to mean that a bfoq is valid only where the *essence* of the business operation would be undermined without it. *Diaz v. Pan Am. World Airways, Inc.*, 442 F.2d 385, 388 (5th Cir.), *cert. denied*, 404 U.S. 950 (1971).

102. The Interpretative Memorandum of Senators Clark and Case provides the basis for this narrow construction in the legislative history. See H.R. Res. 7152, 88th Cong., 1st Sess., 110 CONG. REC. 7213 (1964). Furthermore, the EEOC guidelines drafted in 1965 emphasize the limitations of the exception, and court cases make it clear that the defense was meant to be an extremely narrow exception to the general prohibition of discrimination on the basis of sex and that in order to rely on the *bona fide* occupational qualification exception an employer has the burden of proving that he had reasonable cause to believe, that is, a factual basis for believing, that all or substantially all women would be unable to perform safely and efficiently the duties of the job involved.

Weeks v. Southern Bell Tel. & Tel. Co., 408 F.2d 228, 235 (5th Cir. 1969). See also *Diaz v. Pan Am. World Airways, Inc.*, 442 F.2d 385 (5th Cir.) (a bfoq based on gender for the position of flight attendant did not satisfy 703(e)(1) stipulation of necessary to the normal operation of an airline), *cert. denied*, 404 U.S. 950 (1971). But see *Dothard v. Rawlinson*, 433 U.S. 321 (1977) (because of the peculiarly hostile environment of a male prison, prisons can exclude women from guard positions).

Assuming, *arguendo*, that an employer could raise this defense in the face of a charge of disparate treatment of a protected class (national origin or religion in the ethnic sense) pursuant to a genetic test, the employer would have to prove that "the essence of the business operation would be undermined"¹⁰³ without the exclusion of such persons. To apply this defense to justify exclusion of certain workers on the basis of a genetic abnormality, an employer would have to establish that "all or substantially all"¹⁰⁴ of those workers who had such a genetic abnormality "would be unable to perform safely and efficiently the duties of the job involved"¹⁰⁵ such that the operation of the employer's business was undermined. On this basis, an employer would not be able to show that those he prescreened for genetic abnormalities were unable to perform a given job.¹⁰⁶ To date, courts have not recognized that the essence of a business operation would be undermined when the claim is based on potential harm to prospective employees.¹⁰⁷ Instead, the employer is required to prove that a substantial safety risk to the public at large, clients, or other employees necessitates the exclusion of a given class of persons.¹⁰⁸ However, a bfoq defense by the employer based on genetics would fail because genetic testing neither protects the public at large nor fellow workers.¹⁰⁹ Furthermore, an employer must prove impracticability or impossibility of evaluating the class members individually before excluding an entire class.¹¹⁰ Because a genetic test is done on an individual basis, it is clear that such a defense would fail.¹¹¹ Since the purpose of genetic testing is identifying hypersusceptible workers to protect them from a toxic workplace, and not to protect the safety of others, the employer has no legal justification for excluding workers subject to the bfoq exclusion. If such an employee is willing to engage in employment despite his hypersusceptibility, Title VII currently requires the employer to allow the employee to make that decision.¹¹²

103. *Diaz v. Pan Am. World Airways, Inc.*, 442 F.2d 385, 388 (5th Cir.), *cert. denied*, 404 U.S. 950 (1971) (emphasis in original).

104. *Weeks v. Southern Bell Tel. & Tel. Co.*, 408 F.2d 228, 235 (5th Cir. 1969). *See also* Note, *supra* note 12, at 1205.

105. *Weeks v. Southern Bell Tel. & Tel. Co.*, 408 F.2d 228, 235 (5th Cir. 1969).

106. The issue of hypersusceptibility focuses on the employee's health rather than the ability of such an employee to safely and efficiently perform a given job. Note, *supra* note 12, at 1206 n.93.

107. *Id.* at 1207. *See, e.g., Rosenfeld v. Southern Pac. Co.*, 444 F.2d 1219 (9th Cir. 1971) (certain protective legislation held to be in conflict with the nondiscriminatory intent of Title VII); *Weeks v. Southern Bell Tel. & Tel. Co.*, 408 F.2d 228 (5th Cir. 1969) (protective legislation held invalid).

108. *Crowell & Copus, Safety and Equality at Odds: OSHA and Title VII Clash over Health Hazards in the Workplace*, 2 INDUS. REL. L.J. 567, 583 n.79 (1978). *See also* *Hodgson v. Greyhound Lines, Inc.*, 499 F.2d 859 (7th Cir. 1974) (employer justified no-hire over age forty policy by establishing that entry level assignments were extremely taxing and passenger safety might be at stake), *cert. denied*, 419 U.S. 1122 (1975).

109. Note, *supra* note 12, at 1207.

110. *Weeks v. Southern Bell Tel. & Tel. Co.*, 408 F.2d 228, 235 n.5 (5th Cir. 1969) ("It may be that where an employer sustains its burden in demonstrating that it is impossible or highly impractical to deal with [class members] on an individualized basis, it may apply a reasonable general rule."). *Id.*

111. Note, *supra* note 12, at 1206.

112. *Id.* at 1207. To date, courts have not recognized that harm to a job applicant, such as one's hypersusceptibility to certain toxins, undermines or places a substantial risk on the employer's business. *Id.* Furthermore, Title VII has been interpreted by the Supreme Court to allow a worker to make the choice to work in a hazardous work environment as long as the hazard posed is only to the worker: "the argument that a particular job is too dangerous for women may appropriately be met by the rejoinder that it is the purpose of Title VII to allow the individual woman to make that choice for herself." *Dothard v. Rawlinson*, 433 U.S. 321, 335 (1977) (Title VII requires the employer to allow an individual to decide whether a job is too dangerous unless there is a danger to coworkers or the public at large if he accepts such

2. *Pretextual Discrimination*

The second theory under which a suit of this nature may be analyzed is the pretext theory which applies to seemingly neutral policies adopted by the employer, but which the employee can prove are pretextual for prohibited discrimination.¹¹³ The *McDonnell Douglas* proof scheme¹¹⁴ essentially was created to address this type of disparate treatment where the employee simply claims that the employer's policy, while facially neutral, covertly treated the claimant "less favorably than others because of . . . race, color, religion, sex, or national origin."¹¹⁵ The employer's only defense to this cause of action is denial. The difficulty with this approach is proving an intent to discriminate; it can only be proved circumstantially once the employer has denied it.¹¹⁶

3. *Disparate Impact*

In contrast to disparate treatment cases, the claimant under a disparate impact theory need not prove intentional discrimination but only that a facially neutral policy has a disproportionate impact on his protected class.¹¹⁷ The scheme of proof in such cases provides that once the employee has established a *prima facie* case,¹¹⁸ the burden shifts to the employer to show that the discriminatory practice is a business necessity¹¹⁹ or necessary to safe and efficient job performance.¹²⁰ Even if the

employment); *Bowe v. Colgate-Palmolive Co.*, 416 F.2d 711 (7th Cir. 1969); *Weeks v. Southern Bell Tel. & Tel. Co.*, 408 F.2d 228, 232 (5th Cir. 1969).

113. *Texas Dep't of Community Affairs v. Burdine*, 450 U.S. 248 (1981). Pursuant to *Burdine*, an employer may articulate a legitimate nondiscriminatory reason to rebut an employee's *prima facie* case of discrimination as satisfied by the requirements of *McDonnell Douglas Corp. v. Green*, 411 U.S. 792 (1973). The burden is then shifted to the employee to show that the employer's reason was merely a pretext for discrimination. *Texas Dep't of Community Affairs v. Burdine*, 450 U.S. 248, 252-53 (1981).

114. See *supra* note 97 and accompanying text.

115. *International Bhd. of Teamsters v. United States*, 431 U.S. 324, 335 n.15 (1977); *Wright v. Olin Corp.*, 697 F.2d 1172, 1185 n.20 (4th Cir. 1982).

116. See *Furnco Constr. Corp. v. Waters*, 438 U.S. 567, 567-77 (1978); *Wright v. Olin Corp.*, 697 F.2d 1172, 1185 n.20 (4th Cir. 1982).

117. The Supreme Court's decision in *Griggs v. Duke Power Company*, 401 U.S. 424 (1971) (consequences of application of general intelligence test for minority groups which have a disparate impact are discriminatory), is the origin of this interpretation of the language of Title VII. *Griggs* is the first case to suggest that a claimant may have a cause of action under Title VII without proving an employer's discriminatory intent: "[t]he Act proscribes not only overt discrimination but also practices that are fair in form, but discriminatory in operation." *Id.* at 431. See also *Dothard v. Rawlinson*, 433 U.S. 321 (1977) (employer practices selected employees in a discriminatory pattern); *International Bhd. of Teamsters v. United States*, 431 U.S. 324 (1977) (those facially neutral employment practices which fall more harshly on protected classes are discriminatory).

118. Under a disparate impact theory, the claimant may establish a *prima facie* case by proving "1) the occurrence of certain outwardly neutral employment practices, and 2) a significantly adverse or disproportionate impact on persons of a particular [protected class] produced by the employer's facially neutral acts or practices." *Spaulding v. University of Washington*, 740 F.2d 686, 705 (9th Cir. 1984). See also *Dothard v. Rawlinson*, 433 U.S. 321, 329 (1977).

119. The business necessity defense had its origins in discriminatory hiring cases in which employers relied on hiring requirements purportedly related to the employee's job performance. In *Griggs v. Duke Power Co.*, 401 U.S. 424 (1971), the Supreme Court held that the hiring criteria used by the employer (necessity for a high school diploma and achievement on a written examination) which excluded a disproportionate number of black applicants did not sufficiently relate to job performance to qualify as a business necessity. The Supreme Court applied the same reasoning in another case when the court disallowed an employer's height and weight requirements for the position of prison guard which disqualified a disproportionate number of female applicants on the theory that such requirements had not been shown to be necessary for efficient job performance. See *Dothard v. Rawlinson*, 433 U.S. 321, 331 n.14 (1977).

120. The Supreme Court has, on occasion, implied that business necessity need not be synonymous with

employer meets this burden, the employee may still prevail if he can prove, once again, that the stated business necessity is simply a pretext for discrimination.¹²¹ Such proof may be satisfied by evidence that the employer could have used alternative means to achieve the same purpose with less discriminatory results.¹²²

Relating the disparate impact theory to the practice of testing workers for genetic predispositions to toxins, the legal problem is whether and on what basis employment practices purportedly designed to protect workers from occupational disease can be justified despite their disproportionate adverse impact on worker job opportunities.¹²³ While a cause of action for discrimination based on the use of genetic test results is much more likely under a disparate impact theory than a disparate treatment theory,¹²⁴ application of a disparate impact theory is much more problematic. Although an employee may be able to produce satisfactory statistical evidence¹²⁵ that a genetic screening test used by an employer has a disparate impact on a protected class, what justification for such practices may an employer raise to satisfy the business necessity defense? In general, cases are in agreement that the applicable business necessity test is not whether a business purpose exists to justify a particular employer practice, but whether there exists an overriding legitimate business purpose such that the practice is necessary to the safe and efficient operation of the business.¹²⁶ However, two threshold questions about this defense must be addressed in order to determine the

job-relatedness. See *Nashville Gas Co. v. Satty*, 434 U.S. 136, 143 n.5 (1977). Also, at least one commentator has suggested that the interpretation of *Griggs* is that the employer must prove business necessity *or* that the requirement be related to job performance. G. RUTHERGLEN, *MAJOR ISSUES IN THE FEDERAL LAW OF EMPLOYMENT DISCRIMINATION* 17 (1983). In general, however, courts have accepted the defense as twofold, and several courts have expanded the defense requirements such that an employer must prove "an overriding legitimate business purpose such that the practice is necessary for the safe and efficient operation of the business." *Robinson v. Lorillard Corp.*, 444 F.2d 791, 798 (4th Cir.), *cert. dismissed*, 404 U.S. 1006 (1971). See also *Petway v. American Cast Iron Pipe Co.*, 494 F.2d 211, 246 n.91 (5th Cir. 1974), *cert. denied*, 439 U.S. 1115 (1979).

121. See *Connecticut v. Teal*, 457 U.S. 440, 446-47 (1982); *Dothard v. Rawlinson*, 433 U.S. 321, 329 (1977); *Albermarle Paper Co. v. Moody*, 422 U.S. 405, 425-26 (1975); *McDonnell Douglas Corp. v. Green*, 411 U.S. 792, 804-05 (1973). Since a discrimination case premised on a disparate impact theory does not necessitate that the plaintiff prove discriminatory animus to establish a *prima facie* case, then it also must stand to reason that the plaintiff may prove pretext for discrimination to overcome a business necessity defense with something less than outright evidence of actual discriminatory intent. See *Connecticut v. Teal*, 457 U.S. 440 (1982).

122. The genesis for the "less discriminatory alternatives doctrine" is the Supreme Court's observation that an employer practice which is less discriminatory in impact and which serves as good a purpose as a discriminatory practice must be used in preference to the latter. *Albermarle Paper Co. v. Moody*, 422 U.S. 405 (1975). In *Albermarle*, the Supreme Court struck down standardized tests used by an employer as access to skilled job positions which had a disparate impact on black job applicants as not being job related. *Id.* at 405. The Court noted in its opinion, however, that even if the tests were found to be job related, they could still be struck down if an equally valid predictor of job qualifications would exclude fewer black applicants. Continued use of the discriminatory test in the face of valid alternatives without discriminatory impact would evidence a pretextual basis for a discrimination charge. *Id.* at 436. See also *Head v. Timken Roller Bearing Co.*, 486 F.2d 870, 879 (6th Cir. 1973); *Robinson v. Lorillard Corp.*, 444 F.2d 791, 798 (4th Cir.), *cert. dismissed*, 404 U.S. 1006 (1971).

123. See *Wright v. Olin Corp.*, 697 F.2d 1172, 1188 (4th Cir. 1982).

124. In today's social and legal climate it seems much more likely that an employer would refuse to hire or promote *all* members of a racial group because of a scientifically proven predisposition to an occupational illness of some members in that group. Rothstein, *supra* note 12, at 1453. "Employers are more likely to use neutral medical criteria or screening tests that have a disparate impact on a particular class of persons because of race, color, religion [in the ethnic sense], or national origin." *Id.*

125. Statistics may be used as circumstantial evidence to prove differences in treatment or impact among employees or job applicants. *International Bhd. of Teamsters v. United States*, 431 U.S. 324, 340 (1977).

126. See *Dothard v. Rawlinson*, 433 U.S. 321, 331 n.14 (1977); *Griggs v. Duke Power Co.*, 401 U.S. 424, 432 (1971); *Robinson v. Lorillard Corp.*, 444 F.2d 791, 798 (4th Cir.), *cert. dismissed*, 404 U.S. 1006 (1971).

outcome of a claimant's case under a genetic discrimination argument: 1) may the protection of workers from the possibility of future occupational illness be properly considered a "business necessity"? and 2) how can a practice which excludes workers on the basis of possible future illness be related to the requisite job performance criterion? Clearly, the fact situation presented by genetic discrimination fails to fit neatly into traditional definitions of business necessity and job relatedness.

The business necessity defense is a judicially created doctrine which allows an employer to justify a discriminatory practice.¹²⁷ The doctrine was first enunciated by the Supreme Court in *Griggs v. Duke Power Co.*¹²⁸ which related it to the use of employment testing and educational requirements¹²⁹ which had a disparate impact on black job applicants. The Court held that the employer must prove that the tests and educational requirements bear a demonstrable relationship to job performance.¹³⁰ Since *Griggs*, the business necessity doctrine has been extended by the circuit courts to include employer policies or standards which are justified by issues of workplace safety,¹³¹ not simply ability tests. "The test is whether there exists an overriding legitimate business purpose such that the practice is necessary to the safe and efficient operation of the business."¹³² The Supreme Court has defined the test in terms of whether the practice is necessary to "safe and efficient job performance."¹³³

To assert the business necessity defense in connection with genetic testing, the test arguably must relate to the particular job¹³⁴ and be necessary for the safe and

127. Comment, *Employment Rights of Women in the Toxic Workplace*, 65 CALIF. L. REV. 1113, 1129 (1977).

128. 401 U.S. 424 (1971).

129. The Supreme Court's decision in *Griggs* directed itself specifically to the interpretation of Section 703(h) of Title VII which states in relevant part:

[N]or shall it be an unlawful employment practice for an employer to give and to act upon the results of any professionally developed ability test provided that such test, its administration or action upon the results is not designed, intended or used to discriminate because of race, color, religion, sex, or national origin.

29 U.S.C. § 2000e-2(h) (1976 and Supp. 1979) (emphasis added). The Supreme Court has interpreted *Griggs* to apply to other than ability tests as specified under § 703(1). *Dothard v. Rawlinson*, 433 U.S. 321 (1977). Thus, the business necessity defense has been enlarged to apply more generally to employer practices which have workplace safety and efficiency as their justification. See *infra* note 142 and accompanying text. The expansion of *Griggs* to encompass employer practices beyond ability tests as falling within the business necessity defense justifies analyzing genetic testing within this framework even though it is arguably not strictly an ability test. However, it may also be argued that such a test is indeed an index of the employee's ability to perform the job safely in the future without endangering himself.

130. *Griggs v. Duke Power Co.*, 401 U.S. 424, 436 (1971).

131. *Levin v. Delta Air Lines, Inc.*, 730 F.2d 994 (5th Cir. 1984); *Usery v. Tamiami Trail Tours, Inc.*, 531 F.2d 224, 234-35 (5th Cir. 1976); *Diaz v. Pan Am. World Airways, Inc.*, 442 F.2d 385 (5th Cir.), cert. denied, 404 U.S. 950 (1971) (employer may impose strict standards in hiring criteria if such standards contribute to safety). The Eleventh Circuit has extended the defense to include employer concern for fetal safety. *Hayes v. Shelby Memorial Hosp.*, 726 F.2d 1543, 1552 (11th Cir. 1984) (court simply recognized fetal protection as a "legitimate area of employer concern to which the business necessity defense extends"). *Id.*

132. *Robinson v. Lorillard Corp.*, 444 F.2d 791, 798 (4th Cir.), cert. dismissed, 404 U.S. 1006 (1971). The Fourth Circuit has also accepted this interpretation of business necessity under certain conditions. See *Wright v. Olin Corp.*, 697 F.2d 1172 (4th Cir. 1982) (employer established a policy of prohibiting women of childbearing age from working in certain jobs due to risk to fetuses). Although the policy was struck down as discriminatory because it failed to satisfy the business necessity defense, the court did suggest circumstances under which such practices would constitute a successful business necessity defense. See *infra* notes 144-49 and accompanying text. The Eleventh Circuit stated that justification for this extension rests in proof of a genuine desire on the part of the employers to promote the health of the employee's offspring. See *Hayes v. Shelby Memorial Hosp.*, 726 F.2d 1543, 1553 n.15 (11th Cir. 1984). ("[U]nder our formulation of business necessity, the defense in a fetal protection case is justified by a genuine desire to promote the health of employee offspring, not by self interest."). *Id.*

133. *Dothard v. Rawlinson*, 433 U.S. 321, 332 n.14 (1977).

134. *Griggs v. Duke Power Co.*, 401 U.S. 424, 432 (1971). See also Note, *supra* note 12, at 1204.

efficient operation of the employer's business.¹³⁵ Because of the absence of case law in this area, it is unclear whether avoiding tort liability,¹³⁶ reducing workers compensation claims, or the cost of engineering controls in the workplace are business necessities¹³⁷ and whether the employee's ability to perform the job without risk of future illness is a job-related characteristic.¹³⁸ To illustrate the problem, take the example of an employer's use of a blood test to screen for the sickle cell trait among blacks, the most frequently used test uncovered by the OTA survey.¹³⁹ There is evidence that sickle cell anemia can be aggravated by certain workplace chemicals, and thus a company might wish to screen out workers who carry a sickle cell trait. However, the carrying of one sickle cell trait does not cause anemia. Anemia is the result of carrying two such traits, one from each parent. Scientists have not yet established that a single sickle cell trait is harmful or lowers the carrier's resistance to sickle cell anemia.

If a black were refused employment for having the sickle cell trait, he could bring a prima facie case of discrimination against the employer because the screening test had a disparate impact on his race. The burden would then be on the employer to justify the screening by defending the practice in relation to business needs and legitimate job requirements. As mentioned previously, it is doubtful that the employer could justify the tests under the business necessity defense on the basis of cost savings alone.¹⁴⁰ The employer must also prove that the policy, requirement, or test is necessary for the preservation of workplace safety.¹⁴¹ Yet the issue of whose safety may be properly considered a question of business necessity remains a difficult one.¹⁴² In particular, the question raised is whether an employer may satisfy the

135. *Dothard v. Rawlinson*, 433 U.S. 321 (1977); *United States v. Bethlehem Steel Corp.*, 446 F.2d 652 (2d Cir. 1971); *Robinson v. Lorillard Corp.*, 444 F.2d 791 (4th Cir.), *cert. dismissed*, 404 U.S. 1006 (1971). See generally Note, *supra* note 12, at 1204.

136. The circuit courts appear to be in disagreement on this issue. The Eleventh Circuit's decision in *Hayes v. Shelby Memorial Hosp.*, 726 F.2d 1543 (11th Cir. 1984), specifically rejected the employer's potential liability from the possibility of litigation as "too contingent and too broad a factor to amount to a 'business necessity.'" *Id.* at 1553 n.15. But see *Zuniga v. Kleberg County Hosp.*, 692 F.2d 986 (5th Cir. 1982), where the court appeared to take an opposite stand: "[a]lthough concern over fetal health alone is arguably not the province of the employer, but of the mother, the economic consequences of a tort suit brought against the [defendant] by a congenitally malformed child could be financially devastating, seriously disrupting the 'safe and efficient operation of the business.'" *Id.* at 992 n.10 (citations omitted).

137. Several courts have clearly stated, however, that a business necessity defense may not be based on economic factors such as avoidance of litigation, workers' compensation claims, and engineering costs of decreasing the incidence of occupational disease. See, e.g., *Los Angeles Dep't of Waste & Power v. Manhart*, 435 U.S. 702, 716-17 (1978); *Hayes v. Shelby Memorial Hosp.*, 726 F.2d 1543 (11th Cir. 1984); *United States v. Bethlehem Steel Corp.*, 446 F.2d 652, 662 (2d Cir. 1971).

138. *Hearings* (June 1982), *supra* note 17, at 42 (testimony of Dr. Karney).

139. *Id.* at 16 (statement of Gretchen S. Kolsrud).

140.

Once the employer presents evidence to show that its employment practice is grounded on business necessity, the courts balance all the relevant factors to determine whether the need for the practice sufficiently outweighs any disparate impact. In the case of genetic testing, whether avoiding tort liability or costly engineering controls would be a business necessity is an open question.

REPORT, *supra* note 5, at 125. See also *Hayes v. Shelby Memorial Hosp.*, 726 F.2d 1543, 1553 n.15 (11th Cir. 1984) (employer's potential liability from litigation is too speculative to be considered a business necessity).

141. *Robinson v. Lorillard Corp.*, 444 F.2d 791 (4th Cir.), *cert. dismissed*, 404 U.S. 1006 (1971).

142. Typically, safety as a justification for upholding certain employer policies under the business necessity defense has been based on safety to coworkers (employee with bad back may be refused employment if lifting heavy objects which would endanger coworkers if dropped) or business guests (epileptic may be refused job as bus driver as a seizure would

business necessity defense by justifying his testing on the basis of protecting hypersensitive workers from exposure in contrast to the protection of coworkers or the protection of customers.¹⁴³

While no cases have directly discussed the unique application of the business necessity defense on the theory of protection of a hypersensitive worker from the toxic workplace, a recent decision by the Fourth Circuit, *Wright v. Olin Corp.*,¹⁴⁴ suggests that such a defense may withstand judicial scrutiny under Title VII if certain guidelines are followed. Women employees of the Olin Corporation filed a discrimination suit under Title VII challenging the company's fetal vulnerability program which established three classifications for female employees. Pursuant to one of these classifications, all women identified by the company as fertile (those between the ages of sixteen and sixty-three) were prohibited from holding certain jobs which were identified with a potential risk to a fetus. Women in this classification could only hold these jobs if the company physicians had determined that they could not bear children.¹⁴⁵ The Fourth Circuit vacated that portion of the district court decision which had found the job classifications nondiscriminatory on the theory that there was no intent to discriminate and that the fetal vulnerability policy was justified by sound medical evidence.¹⁴⁶ The circuit court remanded the case for further factual development of the issue under certain legal principles which it enunciated in the case. First, the Fourth Circuit stated that an adverse effect on women's job opportunities because of the fetal vulnerability program raised a presumption of discrimination.¹⁴⁷ The court stated, however, that such a presumption could be defeated under the business necessity test if four criteria were satisfied: 1) the burden of persuasion is on the employer to establish the significant risk of harm and the consequential necessity for the effectiveness of its program; 2) any such program must be supported by the opinion of qualified objective experts in the relevant scientific fields; 3) there is a consensus of opinion among experts that sufficient risk exists and is confined to this class of workers (women in this instance); and 4) there are not any¹⁴⁸ "acceptable alternative policies or practices which would better accomplish the business

endanger passengers). See, e.g., *New York City Transit Authority v. Beazer*, 440 U.S. 568 (1979) (transit authority passenger safety justifies employer policy excluding methadone users from hire); *Burwell v. Eastern Air Lines, Inc.*, 633 F.2d 361 (4th Cir. 1980) (en banc) (airline passenger safety justifies policy of mandatory leave for pregnant stewardesses), cert. denied, 450 U.S. 965 (1981). However, several courts have expanded the business necessity defense to incorporate justification for exclusion of certain workers under higher societal principles such as concern for an individual worker's health or safety or the health of an unborn child. See, e.g., *Hayes v. Shelby Memorial Hosp.*, 726 F.2d 1543, 1553 n.15 (11th Cir. 1984) (rationale in extending the business necessity defense beyond a strict correlation with job performance and safety to others founded on a higher public policy); *Wright v. Olin Corp.*, 697 F.2d 1172, 1190 n.26 (4th Cir. 1982) (business necessity need not be justified other than in terms of general societal interest).

143. *Wright v. Olin Corp.*, 697 F.2d 1172, 1190 n.26 (4th Cir. 1982).

144. 697 F.2d 1172 (4th Cir. 1982).

145. *Id.* at 1182.

146. *Id.* at 1187.

147. *Id.* at 1183.

148. The Fourth Circuit's formulation of the business necessity defense was that "no acceptable alternative" should be part of the employer's burden of establishing the defense. *Robinson v. Lorillard Corp.*, 444 F.2d 791, 798 (4th Cir.), cert. dismissed, 404 U.S. 1006 (1971). However, in *Wright v. Olin Corp.*, 697 F.2d 1172 (4th Cir. 1982), the court retracted from this language in favor of proof of "acceptable alternatives" as the claimant's burden in rebuttal. *Id.* at 1191 n.29.

purpose . . . [of protecting against the risk of harm], or accomplish it equally well with a lesser differential . . . impact [between women and men workers]."¹⁴⁹

One author heralded this decision as a preliminary effort by the courts to address the issue of job discrimination based on genetic testing for two reasons: it implicitly suggests that employers may conduct genetic testing of employees; and it proposes a specific test for determining if such screening programs comply with the law.¹⁵⁰ A note of caution is suggested, however, in adopting the guidelines set forth in the *Wright* decision as being indicative of future decisions dealing with genetic testing. Admittedly, the body of cases dealing with sex discrimination on the basis of fetal protection are as close to the issue of genetic testing as the courts have yet come; however, it is difficult to draw such general parallels as were suggested above for one simple reason: discrimination on the basis of genetic testing affects an individual worker who is capable of making decisions about his own safety and health in contrast to the fetal protection cases which deal not with worker protection per se, but with the protection of a potential third party.

The court in *Wright v. Olin Corp.* went to great lengths to identify the relationship that the fetus bore to recognized categories of persons whose safety represented an overriding business necessity so as to justify such a defense. These included the overall safety of all workers, licensees, and invitees.¹⁵¹ Indeed, the court made it abundantly clear that the employer may not establish a discriminatory practice and defend it on the basis of business necessity when such defense has as the core of its justification the safety or health of a protected class (in this case women) under Title VII.¹⁵² In contrasting the rights of invitees and licensees to those of the worker, the court further stated:

Of such licensees and invitees, it cannot be said—as it can of the workers themselves—that in matters touching their exposure to workplace hazards they, rather than the

149. *Wright v. Olin Corp.*, 697 F.2d 1172, 1191 (4th Cir. 1982).

150. Podgers, *Science Meets "Star Wars": Genetic Factors in Disease*, 12 THE BRIEF (A.B.A.) 14, 39 (August 1983).

151. The court stated:

For purposes of our analysis, the legitimacy of an employer's purpose to protect by discriminatory means the safety of the unborn children of workers would appear to lie conceptually somewhere between a purpose to protect the safety of workers themselves and a purpose to protect that of customers exposed in the normal course to workplace hazards. In attempting to find the more appropriate analogy as between these two objects of safety concerns, it may be helpful to think of unborn children of workers as a special category—though one with quite unique characteristics—of all invitees and licensees legitimately on business premises and exposed to any of its associated hazards. Certainly the safety of unborn children of workers would seem no less a matter of legitimate business concern than the safety of the traditional business licensee or invitee upon an employer's premises.

Wright v. Olin Corp., 697 F.2d 1172, 1189 (4th Cir. 1982).

152. The court stated:

Though the safety of women workers themselves might be thought the most obvious subject of necessary—hence legally justifiable—restrictions on their employment opportunities, the opposite of course has been held. Among the most obvious targets of the sex-discrimination prohibitions of Title VII were those stereotypical assumptions about women workers' special societal role and physical and emotional vulnerabilities which had generated both "protective" laws and private practices restricting their employment opportunities. Rooting out those restrictions has required that they not be routinely justified under any of the business related defenses. Accordingly, the general view when these defenses have been raised by employers has been that they must be rejected because "it is the purpose of Title VII to allow the individual woman to make [the] choice for herself."

Id. at 1188 (citations omitted).

employer, should have the absolute right of choice as against the right of the employer to guard against it by measures impinging on protected workers interests.¹⁵³

Because of the unique issues inherent in the cases dealing with sex discrimination and the business necessity defense of fetal protection, this author cautions against presumptions that analogies exist to genetic testing cases. The critical distinction lies in the business necessity arguments surrounding protection of third parties and the yet untested business necessity argument of protecting certain racially identifiable classes of workers from potential self-harm by foreclosing exposure to that harm. This author therefore questions whether the defense of business necessity vis-a-vis genetic testing as it pertains to the issue of "safe and efficient operation of the business"¹⁵⁴ or "safe and efficient job performance"¹⁵⁵ would succeed. The courts have already borne out the fact that the avoidance of potential liability and consequent economic loss may not suffice, standing alone, to establish a business necessity defense¹⁵⁶ pursuant to the "efficient operation of the business"¹⁵⁷ or "efficient job performance"¹⁵⁸ criteria.

Even assuming *arguendo* that a genetic test is recognized as a business necessity in that it accomplishes the business purpose of ensuring a safe and efficient workplace, such a defense will fail if the employee can establish that alternative practices which are not discriminatory can effectuate the same purpose.¹⁵⁹ In connection with the utilization of alternate practices, evidence of substantially increased cost or inconvenience to the employer is not relevant.¹⁶⁰ Typically, alternative practices would include reduction of exposure levels to toxins in the workplace, utilization of safety equipment such as masks, or implementation of employee rotation systems.¹⁶¹ It is not clear, however, how far an employer must go to find less discriminatory alternative means. The courts tend to agree that an employer need not take extraordinary measures to "cushion the blow for affected employees,"¹⁶² and "[a] 'less discriminatory alternative,' therefore, is only that which accords with the employer's customary practices so amenable that the failure to use the alternative indicates that the legitimate concerns supporting the challenged standard are pretextual."¹⁶³

153. *Id.* at 1189. *See also id.* at n.25. For further discussion of fetal protection policies and civil rights, see Dothard v. Rawlinson, 433 U.S. 321, 335 (1977) ("[I]t is the purpose of Title VII to allow the individual woman to make [the] choice [to work in a hazardous environment] for herself."); Wright v. Olin Corp., 697 F.2d 1172, 1188 (4th Cir. 1982); Burwell v. Eastern Airlines, Inc., 633 F.2d 361, 371 (4th Cir. 1980) (en banc), *cert. denied*, 450 U.S. 965 (1981); Finneran, *Title VII and Restrictions on Employment of Fertile Women*, 31 LAB. L.J. 223 (1980); Williams, *Firing the Women to Protect the Fetus: The Reconciliation of Fetal Protection with Employment Opportunity Goals under Title VII*, 69 Geo. L.J. 641 (1981).

154. Robinson v. Lorillard Corp., 444 F.2d 791, 798 (4th Cir.), *cert. dismissed*, 404 U.S. 1006 (1971).

155. Dothard v. Rawlinson, 433 U.S. 321, 332 n.14 (1977).

156. *See* Los Angeles Dep't of Waste & Power v. Manhart, 435 U.S. 702, 716-17 (1978).

157. Robinson v. Lorillard Corp., 444 F.2d 791, 798 (4th Cir.), *cert. dismissed*, 404 U.S. 1006 (1971).

158. Dothard v. Rawlinson, 433 U.S. 321, 332 n.14 (1977).

159. McDonnell Douglas Corp. v. Green, 411 U.S. 792, 801-02 (1973).

160. *See, e.g.,* Robinson v. Lorillard Corp., 444 F.2d 791, 799 (4th Cir.), *cert. dismissed*, 404 U.S. 1006 (1971); Diaz v. Pan Am. World Airways, Inc., 442 F.2d 385, 388 (5th Cir.) (convenience is irrelevant to a business necessity defense), *cert. denied*, 404 U.S. 950 (1971).

161. For a discussion of these alternatives, see Note, *supra* note 12, at 1214-15.

162. Levin v. Delta Air Lines, Inc., 730 F.2d 994, 1001 (5th Cir. 1984).

163. *Id.*

A further issue which has been addressed by the legal literature on genetic testing is whether a job applicant or employee would have a cause of action under Title VII for refusing to submit to a test which he felt was discriminatory.¹⁶⁴ Section 704(a) of Title VII provides that an employer may not discriminate against an employee or job applicant "because he has opposed any practice made an unlawful employment practice by this title."¹⁶⁵ The employee has a narrow burden of proof under this section. He need not prove that the test was in fact discriminatory, but only that he had a good faith belief that the test was discriminatory.¹⁶⁶ If the employee meets this burden of proof, then pursuant to Title VII he has a right to redress any retaliatory action which his employee may have taken against him for refusing to submit to a test.¹⁶⁷ It therefore appears likely that unless the employer could prove that a test which singled out a protected class was a business necessity (which this author believes is unlikely) or that being genetically pure (a clean gene) is a valid bfoq, an employee could bring a cause of action pursuant to section 704(a) if the employer took retaliatory action against the employee for refusing to submit to the test. Because Title VII also protects prospective employees, a job applicant who refused to submit to a genetic screening test which was allegedly discriminatory (such as a sickle cell test) could bring a cause of action under this section if he could prove that his refusal to submit to the test was the basis on which he was refused employment. Thus, until interpretation of the business necessity defense is extended to include general societal principles such as protecting certain workers from a toxic workplace because of their particular hypersensitivity,¹⁶⁸ an employer arguably has no defense under Title VII for genetic testing today.

B. *The Rehabilitation Act of 1973*

A second avenue which an employee may pursue over concern that he was discharged or denied employment based on the results of a genetic test is the Rehabilitation Act of 1973.¹⁶⁹ This act requires an employer to take affirmative action

164. See REPORT, *supra* note 5, at 124; Rothstein, *supra* note 12, at 1466-67.

165. 42 U.S.C. § 2000e-3(a) (1976 & Supp. 1979).

166. See Rothstein, *supra* note 12, at 1467 and cases cited therein.

167. Rothstein notes that section 704(a) has never been used to decide a case brought by an employee alleging discriminatory treatment for failure to submit to a test. The issue was raised in one case, *Munoz v. Int'l Alliance of Theatrical Stage Employees*, 563 F.2d 205 (5th Cir. 1977), but was decided on other grounds. See Rothstein, *supra* note 12, at 1466. Other cases, however, suggest that the protection afforded employees pursuant to this section is expansive. See, e.g., *Novotny v. Great Am. Fed. Sav. & Loan Ass'n*, 584 F.2d 1235 (3d Cir. 1978) (a male employee who was discharged for trying to promote equal rights for women at his place of employment was considered protected by Title VII and therefore had standing to bring a case thereunder).

168. The court in *Wright v. Olin Corp.*, 697 F.2d 1172 (4th Cir. 1982), did hold that "under appropriate circumstances an employer may, as a matter of business necessity, impose otherwise impermissible restrictions on employment opportunity that are reasonably required to protect the health of unborn children . . ." *Id.* at 1189-90 (emphasis added). However, the same considerations surrounding protection of third party interests do not apply to first party (for example, worker) interests. See *supra* notes 150-58 and accompanying text. The court did recognize, however, that general societal interest may be a valid basis for business necessity since such considerations are currently reflected in other federal legislation (Consumer Product Safety Act, 15 U.S.C. §§ 2051-2083 (1983); Federal Food, Drug and Cosmetic Act, 21 U.S.C. §§ 301-392 (1983)). Under current judicial interpretation of Title VII, however, protecting a worker from a hazard he or she is willing to encounter is not an acceptable societal interest. See *Dothard v. Rawlinson*, 433 U.S. 321 (1977).

169. 29 U.S.C. §§ 701-794 (1976 & Supp. II 1978).

to employ and promote qualified handicapped individuals. To succeed, the employee would have to convince the court that his genetic make-up rendered him a handicapped individual as such term is defined in the Act.¹⁷⁰

In enacting this statute, Congress "made a commitment to the handicapped that, to the maximum extent possible, they shall be fully integrated into the mainstream of life in America."¹⁷¹ The Act, as amended in 1974,¹⁷² defines a handicapped individual as anyone who "(A) has a physical or mental impairment which substantially limits one or more of such person's major life activities, (B) has a record of such an impairment, or (C) is regarded as having such an impairment."¹⁷³ Protection from discrimination by employers is afforded such individuals under section 503¹⁷⁴ (affirmative action) and section 504¹⁷⁵ (nondiscrimination) of the Act. Section 503 requires that any party who enters into a contract in excess of 2500 dollars with the federal government take affirmative action to employ and promote qualified handicapped individuals.¹⁷⁶ Section 504, which covers recipients of federal grants, requires that such recipients not exclude qualified handicapped persons from participation in, deny them benefits from, or subject them to discrimination under any program or activity receiving federal financial assistance.¹⁷⁷ The obvious limitation of this Act is that it only protects employees whose employers receive federal funds.¹⁷⁸ Another limitation of the Act for employees is the uncertainty surrounding the right to bring a private cause of action under the Act. While the courts have generally held that section 503 does not create a private cause of action, courts have disagreed as to whether section 504 so provides.¹⁷⁹

In order to establish a *prima facie* case under the Act, a plaintiff must establish that 1) he is a handicapped person under the Act; 2) he is otherwise qualified for the position sought; 3) he was rejected from the position sought solely on the basis of his handicap; and 4) the employer of the job or activity in question is a recipient of federal financial assistance.¹⁸⁰

170. See *infra* note 173 and accompanying text.

171. S. REP. NO. 890, 95th Cong., 2d Sess. 39 (1978).

172. Prior to the amended version, the definition of handicapped included only those disabilities which substantially limited one's employment or ability to obtain employment. See Rehabilitation Act of 1973, § 7(6), 87 Stat. 355 (1973) (current version at 29 U.S.C. §§ 701-794 (1976 & Supp. II 1978)).

173. 29 U.S.C. § 706(7)(B) (Supp. II 1978). Based on the breadth of this definition and the implementing regulations, it is estimated that between 40 to 68 million people are covered by this statute. REPORT, *supra* note 5, at 126.

174. 29 U.S.C. § 793(a) (1976 & Supp. II 1978). This section is implemented by regulations promulgated by the Department of Labor. See 41 C.F.R. §§ 60-1.1 to 741 (1976).

175. 29 U.S.C. § 794 (1976 & Supp. II 1978). This section is implemented by regulations promulgated by the Department of Health and Welfare. See 45 C.F.R. § 84 (1981).

176. 29 U.S.C. § 793(a) (1976 & Supp. II 1978).

177. 29 U.S.C. § 794 (1976 & Supp. II 1978).

178. While this is indeed a limitation, it has provoked most states to enact their own statutes proscribing employment discrimination on the basis of a handicap. Because of the jurisdictional limitations of the federal statute, most cases of handicap discrimination are brought under state laws. REPORT, *supra* note 5, at 126.

179. The second, fifth, sixth, and seventh circuits have all had an opportunity to rule on the issue of the existence of a private cause of action under section 503 and have consistently held there is no right of private action. See McGarity and Schroeder, *supra* note 12, at 1059 n.255 for the decisions in those circuits. Those courts which have provided for a private cause of action under section 504 have done so only in those cases where the primary purpose of the federal aid was to provide employment. See *id.* at 1057; Rothstein, *supra* note 12, at 1440.

180. See *Bentivegna v. United States Dep't of Labor*, 694 F.2d 619 (9th Cir. 1982); *Doe v. New York Univ.*, 666 F.2d 761, 774 (2d Cir. 1981).

A threshold question regarding the application of the Act is whether an employee satisfies the definition of handicapped under the Act. Three critical terms set forth in the Act's definition of handicapped individuals—physical or mental impairment, substantially limits, and major life activities—are not elaborated upon in the Act. However, pursuant to regulations promulgated under section 503 by the Office of Federal Contract Compliance Programs (OFCCP), an explanation of these phrases can be found. A handicapped individual is "'substantially limited' if he or she is likely to experience difficulty in securing, retaining or advancing in employment because of a handicap."¹⁸¹ "Major life activities" means "functions such as caring for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and *working*."¹⁸² "Physical or mental impairment" is defined as:

(A) any physiological disorder or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems: neurological; musculoskeletal; special sense organs; respiratory, including speech organs; cardiovascular; reproductive, digestive, genito-urinary; hemic and lymphatic; skin; and endocrine; or (B) any mental or psychological disorder, such as mental retardation, organic brain syndrome, emotional or mental illness, and specific learning disabilities.¹⁸³

Again, a person is handicapped if he is regarded as having such an impairment.¹⁸⁴

The term "physical or mental impairment," as defined by OFCCP regulations, is of particular importance in analyzing whether an employee's genetic make-up places the employee among

those individuals who are *perceived* as having a handicap, whether an impairment exists or not, but who, because of attitudes or for any other reasons, are regarded as handicapped by employers, or supervisors who have an effect on the individual securing, retaining, or advancing in employment.¹⁸⁵

Pursuant to OFCCP interpretation of the Act's definition of handicapped and supporting case law, it is evident that an employer-perceived handicap renders an individual subject to protection from discriminatory treatment under the Act.¹⁸⁶ Consonantly, an employee or job applicant who shows a hypersusceptibility to occupational illness through genetic testing may be protected as handicapped under current application of the Act.

Although to date there have been no cases brought on the theory that genetic make-up represents a handicap, a recent case of first impression which is relevant to our analysis is *E.E. Black, Ltd. v. Marshall*.¹⁸⁷ The case addresses issues similar to those presented by genetic disorders. An example is whether a worker with an identified physical disability, which does not presently impair his work ability but which might impair his work ability in the future, falls under the protection of the Act.

181. 41 C.F.R. §§ 60-741.2 (1981).

182. 45 C.F.R. § 84.3(j)(2)(ii) (1981) (emphasis added).

183. *Id.* at § 84.3(j)(2)(i).

184. 29 U.S.C. § 706(7)(3) (Supp. II 1978).

185. 41 C.F.R. §§ 60-741 (1982) (emphasis added).

186. See *infra* notes 194-99 and accompanying text. See also Rothstein, *supra* note 12, at 1442-44.

187. 497 F. Supp. 1088 (D. Hawaii 1980). See also McGarity & Schroeder, *supra* note 12, at 1057; Rothstein, *supra* note 12, at 142-45.

In *Black*, the plaintiff was a carpenter's apprentice, a job which required frequent bending, twisting, and heavy lifting. The apprenticeship program required eight thousand hours of work in the field. In May 1976, three years and 3600 hours after plaintiff had entered the program, his union referred him to E.E. Black, Ltd., a general construction contractor. The contractor required all applicants to submit to a preemployment physical examination. Plaintiff was diagnosed as having a congenital back anomaly which the contractor determined would make him a poor risk for heavy labor and denied him employment.¹⁸⁸ Plaintiff filed a complaint with the OFCCP alleging a violation of section 503. The administrative law judge found that the plaintiff was not a handicapped individual under the Act because the Labor Department had failed to prove that the perceived impairment substantially limited a major life activity of plaintiff—in this case his job.¹⁸⁹ The OFCCP filed exceptions to the judge's Recommended Decision and Order which were heard by the Assistant Secretary of Labor¹⁹⁰ who found in favor of plaintiff. The Assistant Secretary found that

coverage under the Act did not require a showing that the impairment impeded activities relevant to many or most jobs, but rather that protection "under the Act is extended to every individual with an impairment which is a current bar to employment which the individual is currently capable of performing."¹⁹¹

The Assistant Secretary also found that since the perceived impairment prevented plaintiff from obtaining the job he wanted, he qualified as handicapped under the Act.¹⁹² Furthermore, the term "impairment" was interpreted to mean "any condition which weakens, diminishes, restricts, or otherwise damages an individual's health or physical or mental activity" resulting in "a current bar to the employment of one's choice with a federal contractor which the individual is currently capable of performing."¹⁹³

On review, the United States District Court for the District of Hawaii found that the Assistant Secretary's definition of handicapped was overbroad by neglecting the import of the words "substantially limited."¹⁹⁴ The court held that not every physical condition that limits employment constitutes a handicap. It emphasized the importance of a case by case determination as to whether the impairment or perceived impairment of a rejected, qualified job seeker constitutes a substantial handicap to employment for that individual.¹⁹⁵ The court stated that the important factors to such a determination would include analysis of the number and types of jobs from which the impaired individual is disqualified, the geographic location to which the applicant has reasonable access, and the individual's own job expectations and training.¹⁹⁶

188. *E.E. Black, Ltd. v. Marshall*, 497 F. Supp. 1088, 1091 (D. Hawaii 1980).

189. *Id.* at 1093.

190. *Id.* at 1094.

191. *Id.*

192. *Id.* at 1095.

193. *Id.* at 1094.

194. *Id.* at 1099.

195. *Id.* at 1100.

196. *Id.* at 1100-01.

Utilizing this definition, the court nevertheless concluded that the plaintiff was a handicapped person subject to the protection of the Act.¹⁹⁷ The court held that the plaintiff "either had an impairment or was regarded as having an impairment" and that such "constituted, for him, a substantial handicap to employment"¹⁹⁸ because he would have been rejected from all or substantially all similar jobs. The court unfortunately circumvented the issue of whether, as E.E. Black contended, Congress did not intend to protect job applicants denied employment based on risk of future injury.¹⁹⁹ The district court did reject, however, the Assistant Secretary's broad interpretation that physical or mental conditions can never be the basis for rejecting a qualified handicapped individual "irrespective of the likelihood of injury, the seriousness of the possible injury or the imminence of the injury."²⁰⁰

The *Black* case has significance to cases of employment discrimination based on genetic testing. From the decision, we can conclude that a possibility of future impairment can be considered an impairment protected under the Act if perceived to be a handicap by the employer.²⁰¹ Further, the decision suggests that a person having a genetic abnormality which makes him hypersusceptible may be considered handicapped under the Act.²⁰²

Assuming that a court would find that an employee with a genetic hypersusceptibility was handicapped, the next element in a plaintiff's prima facie case is proof that he was otherwise qualified for the position sought.²⁰³ The regulations to both sections 503 and 504 of the Act define the term "otherwise qualified handicapped." The Department of Labor defines a qualified handicapped person as one "who is capable of performing a particular job, with reasonable accommodation to his or her handicap,"²⁰⁴ while the HEW regulations provide that a qualified handicapped person is a person who "with reasonable accommodation, can perform the essential functions of the job in question."²⁰⁵ The Supreme Court has defined the term "otherwise qualified handicapped" as simply one who can satisfy all of a program's requirements despite his handicap.²⁰⁶ This clearly does not mean, however, that an employer may

197. *Id.* at 1103.

198. *Id.* at 1102.

199. *Id.* at 1103.

200. *Id.* at 1104.

201. *Id.*

202. *Id.* See also REPORT, *supra* note 5, at 128.

203. See *supra* note 180 and accompanying text for the requirements necessary to establish a prima facie case of discrimination under the Act.

204. 41 C.F.R. §§ 60-741.2 (1981).

205. 42 Fed. Reg. 22,678 (1977) codified in 45 C.F.R. § 84.3(k)(1) (1981). The discrepancy in the language between the two sets of regulations was justified by the Secretary of HEW who suggested that the purpose of the additional words "essential functions" to the regulations of section 504 was "useful in emphasizing that handicapped persons should not be disqualified simply because they may have difficulty in performing tasks that bear only a marginal relationship to a particular job." 42 Fed. Reg. 22,686 (1977). See also *Protecting the Disabled Minority: Rights and Remedies under Sections 503 and 504 of the Rehabilitation Act of 1973*, 22 St. Louis U.L.J. 25, 30 (1978).

206. *Southeastern Community College v. Davis*, 442 U.S. 397, 406 (1979). In dicta, the Court indicated that even if an individual could not meet all of a program's requirements, he might still be otherwise qualified. This would occur under circumstances in which the employer unreasonably refused to accommodate a handicapped person, thereby discriminating against him. *Id.* at 412-13. See also *Prewitt v. United States Postal Service*, 662 F.2d 292 (5th Cir. 1981) (the court referred to such a refusal to accommodate a handicapped individual as a "surmountable barrier to discrimi-

discriminate by establishing restrictive program requirements which serve to screen out the handicapped.

Once the plaintiff has proved his *prima facie* case that he is qualified for the job despite his handicap, the burden shifts to the employer to justify the medical examination as job related. While the regulations to both sections 503 and 504 provide for preemployment medical examinations of employees,²⁰⁷ in both instances the examinations must be job related. This fact is reflected in the regulations interpreting section 504.²⁰⁸ These regulations provide that job qualifications "which would tend to exclude handicapped individuals because of their handicap . . . shall be related to the specific job or jobs for which the individual is being considered and shall be consistent with business necessity and safe performance."²⁰⁹ The regulations to section 503 place similar restrictions on the employer's job qualification requirements.²¹⁰ Clearly, the purpose of preserving job opportunities for the handicapped sets a high standard for those job qualifications which adversely affect the handicapped. If a job qualification or medical examination is to be permitted to exclude handicapped individuals, it must be directly connected with and must substantially promote "business necessity and safe performance."²¹¹ Conceivably, under these three criteria—job relatedness, business necessity, and safe performance of the job—an employer would be able to justify discrimination on the basis of genetic screening if the courts accepted a business necessity defense based on future job safety concerns.²¹²

Once again an analogy may be made to the *Black* decision in analyzing a genetic discrimination case. In *Black*, the court determined that the company's job requirement relating to plaintiff's back condition was one that "tended to screen out qualified handicapped individuals."²¹³ Therefore, the company had the burden of proving the test was "related to the job for which [plaintiff] was rejected, and that the requirement is consistent with business necessity and the safe performance of the job."²¹⁴ The

nation"); *Simon v. St. Louis County*, 656 F.2d 316 (8th Cir. 1981), *cert. denied*, 455 U.S. 976 (1982); *Tatro v. State of Texas*, 625 F.2d 557 (5th Cir. 1980).

207. The adopted regulations interpreting section 504 specifically provide that although medical examinations may be given to prescreen employees, such medical examinations must be given to all employees. 28 C.F.R. §§ 41.55, 42.513 (1982). The regulations to section 503 provide that an employer may require a preemployment physical of handicapped applicants even if it is not required of all applicants. 41 C.F.R. §§ 60-741.6 (1982).

208. 29 C.F.R. § 32.14 (1982).

209. *Id.* § 32.14(b). These regulations suggest the same limitations set forth in Title VII that any discriminatory practices by an employer must be justified by a showing of business necessity and a relationship to safe performance on the job. *See supra* notes 127-33 and accompanying text discussing these requirements under Title VII.

210. Pursuant to the regulations to section 503, if the employer's job qualifications "tend to screen out qualified handicapped individuals, the requirements shall be related to the specific job or jobs for which the individual is being considered and shall be consistent with business necessity and the safe performance of the job." 41 C.F.R. §§ 60-741.6(c)(2) (1982).

211. 29 C.F.R. § 32.14 (1982).

212. *See* REPORT, *supra* note 5, at 129; Rothstein, *supra* note 12, at 1442. As discussed in the preceding section on Title VII, it is unlikely that the courts would adopt a business necessity defense based on economic considerations. *See supra* note 137 and accompanying text. However, while it is unclear under Title VII whether a valid defense to a discriminatory practice is protection of the worker from self-harm, it is clear under the Rehabilitation Act that such justification is more readily acceptable. *See* McGarity & Schroeder, *supra* note 12, at 1051 n.217.

213. *E.E. Black, Ltd. v. Marshall*, 497 F. Supp. 1088, 1103 (D. Hawaii 1980).

214. *Id.*

court in *Black* rejected the company's business necessity defense based on concern over increased workers' compensation costs and OSHA compliance.²¹⁵ The court, in refusing to address the issue of whether the risk of possible future injury could be a defense to a discriminatory practice, stated:

The Court has no doubt that in some cases a job requirement that screens out qualified handicapped individuals on the basis of possible future injury, could be both consistent with business necessity and the safe performance of the job. However, at this stage in the case the Court is not prepared to formulate a legal standard.²¹⁶

The EEOC guidelines on Employee Selection Procedures which have been cited with approval by the Supreme Court also raise questions about the use of genetic tests to screen employees.²¹⁷ The guidelines state that "discriminatory tests are impermissible unless shown, by professionally accepted methods, to be predictive of or significantly correlated with important elements of work behavior which comprise or are relevant to the job or jobs for which candidates are being evaluated."²¹⁸ Pursuant to this criteria, it was necessary for the company in *Black* to prove: 1) an important element of the job was the lifting of heavy objects; 2) employees with back problems would be unable to satisfactorily perform the job; and 3) the testing required of job applicants had a high predictive value in determining the likelihood that the individual would sustain such on-the-job injuries.²¹⁹ Applying a similar analysis to genetic screening, the burden on the employer would be to prove: 1) an important element of the job was working with certain toxins; 2) hypersusceptible employees were unable to satisfactorily perform the job; and 3) genetic screening has a high predictive value in determining the likelihood that the individual would become hypersusceptible.

Even if the employer were to satisfy the above criteria, the regulations to both sections 503 and 504 require that an employer make "reasonable accommodation" for the handicapped individual.²²⁰ The Supreme Court has indicated, however, that an employer need not accommodate a handicapped individual if 1) such accommodation would necessitate modification of the essential nature of the program; and 2) it would place undue burdens, such as extensive costs, on the recipient of the federal funds.²²¹ Although the regulations to section 503 do not define reasonable accommodation, one view suggests that it includes "making facilities accessible, restructuring jobs, modifying work schedules, acquiring or modifying equipment or devices, adjusting or modifying examinations appropriately" and other similar action.²²² It has been proposed that reasonable accommodations for hypersusceptible

215. *Id.* at 1095. For other economic justifications for discriminatory practices based on genetic tests which an employer might proffer, see Rothstein, *supra* note 12, at 1445.

216. *E.E. Black, Ltd. v. Marshall*, 497 F. Supp. 1088, 1104 (D. Hawaii 1980).

217. *REPORT*, *supra* note 5, at 129.

218. 29 C.F.R. § 1607.4(c) (1980).

219. *REPORT*, *supra* note 5, at 129-30.

220. *See Southeastern Community College v. Davis*, 442 U.S. 397, 410, 412 (1979); 41 C.F.R. §§ 60-741.6(d) (1982).

221. *Southeastern Community College v. Davis*, 442 U.S. 397, 410-13 (1979).

222. Rothstein, *supra* note 12, at 1450.

workers would mean "shift rotation, dividing maximum exposure time, more frequent monitoring and medical surveillance, and the added use of personal protection equipment."²²³ The issue of accommodation under the Rehabilitation Act raises the question of whether an employer might be obligated to reduce exposure levels for various toxins below the standards required by OSHA to accommodate the handicapped.²²⁴

C. State Antidiscrimination Laws

Of fundamental importance in analyzing statutory protection for hypersusceptible workers at both the state and federal levels is the definition of the term "handicapped" and the scope of the qualification that the handicap be job related. More cases dealing with the qualification that the handicap be job related have appeared at the state than at the federal level.²²⁵ Furthermore, forty-two states and the District of Columbia have some form of antidiscrimination statute concerning the handicapped.²²⁶ Oddly, however, nearly all of the reported handicap cases have been decided under the laws of New York, Oregon, Washington, and Wisconsin.²²⁷

The Supreme Court of Wisconsin has read that state's Fair Employment Act²²⁸ so as to protect a wide range of handicapped individuals. In one case the court found that a person refused employment because of a history of asthma was covered by the Act, stating: "If the individual can function efficiently on the job, then the mere fact that he is different from the average employee as to those statutorily proscribed bases [for example, female, old, handicapped] may not be used as a basis for discrimination."²²⁹ The court went on to define a handicap as "a disadvantage that makes achievement unusually difficult; esp[ecially]: a physical disability that limits the capacity to work."²³⁰

In another Wisconsin case,²³¹ an applicant was denied employment because he had only one kidney and the job required that he work on stainless steel tanks ten to twelve feet above a concrete floor. The company acknowledged that the plaintiff was qualified for the job, but was concerned that a fall would damage his remaining kidney and cost the company substantial outlay in workers' compensation.²³² The court found that the complainant was protected by the Wisconsin Fair Employment Act even though his condition did not hinder his present ability to perform the job because of a "perceived sensitivity to injury in the future."²³³ According to this

223. REPORT, *supra* note 5, at 130.

224. *Id.*; Rothstein, *supra* note 12, at 1451.

225. McGarity & Schroeder, *supra* note 12, at 1053.

226. For a list of the forty-two states and their statutory citations, see Rothstein, *supra* note 12, at 1436-37 n.392.

227. McGarity & Schroeder, *supra* note 12, at 1053.

228. WISC. STAT. ANN. §§ 111.31-.37 (West 1974).

229. Chicago, M., St. P. & P.R. Co. v. State, Dep't of I., L. & H.R., 62 Wis. 2d 392, 397, 215 N.W.2d 443, 445 (1974).

230. *Id.* at 398, 215 N.W.2d at 446.

231. Dairy Equip. Co. v. Dep't of Indus., Labor & Human Relations, 95 Wis. 2d 319, 290 N.W.2d 330 (1980).

232. *Id.* at 321-22, 290 N.W.2d at 332.

233. *Id.* at 330, 290 N.W.2d at 335.

judicial interpretation of the term "handicapped," it appears that an applicant denied employment based on genetic screening has a valid cause of action under Wisconsin's handicap statute.²³⁴

In the state of Washington, the supreme court also has applied a broad interpretation to the term "handicapped." A handicap is "a condition that prevents normal functioning in some way."²³⁵ As one author notes, "[t]his expansive reading of the prohibition on discrimination against the handicapped could lead to the elimination of all physical and mental criteria not necessary for the job."²³⁶

Although the claimant may be successful on a cause of action for discrimination pursuant to genetic testing because of the Wisconsin and Washington Supreme Courts' interpretations of the term "handicapped," the claimant would not fare so well in either the state of Illinois or North Carolina. In Illinois, the court of appeals limited a handicap to mean "physical and mental conditions which are generally believed to impose severe barriers upon the ability of an individual to perform major life functions."²³⁷ The court specifically eschewed the Wisconsin and Washington court interpretations.²³⁸ The North Carolina Supreme Court has interpreted the term narrowly such that an applicant who was refused employment because of glaucoma was not protected by the act as handicapped because he had 20/20 vision.²³⁹ Still other states limit the definition of handicapped statutorily. The Hawaiian statute defines a handicap as "a substantial physical impairment where such handicap is verified by medical findings and appears reasonably certain to continue throughout the lifetime of the individual without substantial improvement."²⁴⁰

Thus, there is no consensus among the state courts as to what is protected under handicap legislation, and it would be difficult to determine (except perhaps in the case of Washington and Wisconsin) which states would consider a genetic differential a handicap. Some states, however, have confronted the issue directly by specifically proscribing discriminatory use of certain genetic screening tests in the workplace. For example, Florida,²⁴¹ Louisiana,²⁴² and North Carolina²⁴³ all prohibit discrimination in employment based on the sickle cell trait. New Jersey has adopted a much more comprehensive statute which specifically proscribes employment discrimination on the basis of an individual's "atypical hereditary cellular blood trait."²⁴⁴ This has been

234. Indeed, one author has noted that the Wisconsin Fair Employment Act is sufficiently broad so as to strike down any unnecessary employment screens if they result in the exclusion of applicants who are otherwise qualified. See McGarity & Schroeder, *supra* note 12, at 1054.

235. Chicago, M., St. P. & P.R. Co. v. Washington State Human Rights Comm'n, 87 Wash. 2d 802, 805, 557 P.2d 307, 310 (1976). See also Kimmel v. Crowley Maritime Corp., 23 Wash. App. 78, 82, 596 P.2d 1069, 1071 (1979) (handicap means abnormal).

236. McGarity & Schroeder, *supra* note 12, at 1055.

237. Advocates for the Handicapped v. Sears, Roebuck & Co., 67 Ill. App. 3d 512, 516-17, 385 N.E.2d 39, 43 (1978), *cert. denied*, 444 U.S. 981 (1979).

238. *Id.* at 516, 385 N.E.2d at 43.

239. Burgess v. Joseph Schlitz Brewing Co., 298 N.C. 520, 259 S.E.2d 248 (1979).

240. HAWAII REV. STAT. § 378-1(7) (1976).

241. See FLA. STAT. ANN. 760.10 (West Supp. 1985).

242. See LA. REV. STAT. ANN. § 46.2254 (West 1982).

243. See N.C. GEN. STAT. § 95-28.1 (1981).

244. N.J. STAT. ANN. § 10:5-12 (West Supp. 1985).

defined to include sickle cell trait, hemoglobin C trait, thalassemia trait, Tay-Sachs trait, or cystic fibrosis trait.²⁴⁵

A number of cases under state handicap discrimination statutes have addressed the relationship between job criteria and exclusion of applicants from jobs on the basis of possible future risk of injury. In a recent California decision,²⁴⁶ the court held that the employer's evidence, at best, showed only a *possibility* that the employee might endanger his health sometime in the future because of a handicap to the lower back. Consequently, this evidence was not a sufficient basis for refusing him employment as a truck driver.²⁴⁷ In another decision, the Supreme Court of California held that an employer could not refuse work to an applicant for a sales job on the basis that he *might* become handicapped in the future due to high blood pressure.²⁴⁸ Similarly, in a New York case involving discrimination on the basis of high blood pressure, the court identified the central issue as whether the complainant's physical condition *related* to her ability to engage in the duties of the job she was denied.²⁴⁹ In another New York case, *Westinghouse Electrinc v. State Division of Human Rights*,²⁵⁰ the court found that an applicant's dermatitis was job related where the employer showed by clear, convincing, and uncontradicted medical evidence that the applicant's dermatitis would be exacerbated by exposure to workplace chemicals.²⁵¹ In Oregon, the supreme court applied a standard similar to that of California in reviewing the denial of employment for a salesperson job. The basis for denial was that the applicant had suffered sporadic angina and was thus a likely candidate for a heart attack.²⁵² The court, in discussing the relationship between job requirements and future risk of injury, set up a standard which imposed upon the employer

the obligation not to reject a prospective employee because of a physical or mental handicap unless there is, because of the defect, a *probability* either that the employee cannot do the job in a satisfactory manner or that he can do so only at the risk of incapacitating himself.²⁵³

In general, the courts in the above states place a difficult burden on the employer to establish either a reasonable probability that the handicapped worker will suffer additional injury in the future or inability to perform so as to justify a decision by an employer not to hire such an applicant. Thus, it would appear that under these state statutes an employee who was discriminated against on the basis of a genetic test would succeed in his cause of action. An employer would have a difficult burden to

245. See REPORT, *supra* note 5, at 128.

246. *Sterling Transit Co. v. Fair Employment Practice Comm'n*, 121 Cal. App. 3d 791, 175 Cal. Rptr. 548 (1981). See also *State Personnel Bd. v. Fair Employment and Housing Comm'n*, 149 Cal. App. 3d 429, 196 Cal. Rptr. 815 (1983).

247. *Sterling Transit Co. v. Fair Employment Practice Comm'n*, 121 Cal. App. 3d, 791, 799, 175 Cal. Rptr. 548, 552 (1981).

248. *American Nat. Ins. Co. v. Fair Employment and Housing Comm'n*, 32 Cal. 3d 603, 186 Cal. Rptr. 345 (1982).

249. *Arnot Ogden Mem. Hosp. v. State Div. of Human Resources*, 67 A.D.2d 543, 546, 416 N.Y.S.2d 372, 373 (1979).

250. 63 A.D.2d 170, 406 N.Y.S.2d 912 (1978).

251. *Id.* at 172, 406 N.Y.S.2d at 914.

252. *In re Montgomery Ward & Co.*, 280 Or. 163, 570 P.2d 76 (1977).

253. *Id.* at 79 (emphasis added). *Accord* *Pacific Motor Trucking Co. v. Bureau of Labor*, 64 Or. App. 361, 668 P.2d 446 (Or. Ct. App. 1983); *Chicago and N.W. R.R.*, 98 Wis. 2d 592, 297 N.W.2d 819 (1980).

overcome in utilizing genetic screening which evidences a possibility (not even a probability) of future disability on behalf of the applicant.

D. Privacy Rights, Confidentiality, Right to Know, and Informed Consent

Yet another concern of workers over the use of genetic testing in the employment setting addresses personal privacy issues.²⁵⁴ In particular, employee concerns focus on the constitutionally protected right to privacy, confidentiality of the results of the tests, right to know of the results of the tests, and informed consent to the tests.

Although the Supreme Court has recognized a general constitutional right to privacy,²⁵⁵ there is to date no recognized constitutional²⁵⁶ or common law right²⁵⁷ to privacy within the employment setting in regard to employer testing. In other words, absent statutory prohibition²⁵⁸ or specific limitations on testing in collective bargaining agreements,²⁵⁹ an employee must either comply with preemployment physical examination requirements (including genetic testing) or on-the-job physical examinations (including genetic monitoring) or suffer the consequences (including loss of employment).²⁶⁰ An advisory commission created by The Privacy Act of 1974²⁶¹ made recommendations that individuals be given the right to grant or withhold medical information from their employment files.²⁶² However, this recommendation has yet to be acted upon.

In addition to employee concern over whether the employer may extract certain private health information from the employee, there is concern over dissemination of the information acquired by the employer. Although the common law physician-patient privilege requires confidentiality of information given to the physician by the patient, this privilege does not extend to the relationship between the company

254. *Hearings* (Oct. 1981), *supra* note 17, at 32 (testimony of Sheldon Samuels) ("[c]onfidentiality, access to records for research, treatment and compensation, physician independence must be guaranteed").

255. The Supreme Court has recognized as protected under a constitutional right to privacy issues covering procreation (*Skinner v. Oklahoma*, 316 U.S. 535 (1942)), contraception (*Eisenstadt v. Baird*, 405 U.S. 438 (1972)), and abortion (*Roe v. Wade*, 410 U.S. 113 (1973)). *See also* *Griswold v. Connecticut*, 381 U.S. 479 (1965); T. HAYDEN, *YOUR RIGHTS TO PRIVACY* (1980); Note, *Exclusionary Employment Practices*, *supra* note 29, at 134. However, the constitutional right to privacy is not absolute, but may be tempered by state or federal regulation concerning health and safety. *See Roe v. Wade*, 410 U.S. 113, 153 (1973) ("The Court's decisions recognizing a right of privacy also acknowledge that some state regulation in areas protected by that right is appropriate.").

256. The constitutional right to privacy is only applicable to state or federal government action. There is not equivalent limitation on actions by private industry unless state or federal law is applicable.

257. *See, e.g.*, *Cort v. Bristol-Myers Co.*, 385 Mass. 300, 431 N.E.2d 908 (1982) (employees' claim of invasion of privacy by their employer for requiring completion of medical questionnaire was denied).

258. Maryland is one of the few states which has enacted a statute limiting the employer's right to require information of employees for job applications. *See* MD. ANN. CODE art. 100, § 95A (1979).

259. *See* Rothstein, *supra* note 12, at 1471. It is not typical for a collective bargaining agreement to contain limitations on the amount or substance of information an employer can require his employees to provide. To date, unions have not been overly concerned with their constituents' right to privacy. On the other hand, unions have been concerned about dissemination to employees of information concerning toxic substances which has resulted in state and federal right to know legislation. *See infra* notes 277-83 and accompanying text.

260. However, if an employee believes that a test is discriminatory, he may, pursuant to § 704(a) of Title VII, refuse to submit to the test and cannot be retaliated against for doing so. 42 U.S.C. § 2001(a) (1976 and Supp. 1979). *See also supra* notes 165-67 and accompanying text; Rothstein, *supra* note 12, at 1471 n.595 and cases cited therein.

261. 5 U.S.C. § 552(a) (1976).

262. *See generally* THE PRIVACY COMMISSION RECOMMENDATION ON EMPLOYEE ACCESS IN INDIVIDUAL RIGHTS IN THE CORPORATION (A. Westin & S. Salisbury eds. 1980).

physician and the employee.²⁶³ Most jurisdictions hold that the physician's responsibilities, if performed on behalf of the employer, render him responsible solely to the employer.²⁶⁴ Consequently, the employee is unaware of the potential hazards, thus the decision of whether or not to leave the employee in that environment is left to the employer by default to be based on the employer's interpretation of the tests.²⁶⁵ Because genetic information may be helpful by warning of hypersusceptibility or predisposition to disease, test results may be important to workers' families or even to coworkers.²⁶⁶ Under these circumstances, a company physician may have a duty to disseminate the information to others at risk.²⁶⁷ Furthermore, the National Labor Relations Board has held that a union was entitled to receive medical information acquired by the employer concerning his employees when toxic substances were involved.²⁶⁸ The Code of Ethical Conduct for Physicians Providing Occupational Medical Services²⁶⁹ even provides that the physician is to treat as confidential whatever is learned about the individual employee. However, "employers are entitled to counsel about the medical fitness of individuals in relation to work, but are not entitled to diagnoses or details of a specific nature."²⁷⁰ Pursuant to regulations promulgated by OSHA, employers are required to release employee medical records to the government upon request.²⁷¹ The regulations, however, do contain prohibitions on dissemination of the information and requirements for confidentiality, as well as a requirement that the results of any analysis done by the agency be communicated to employees whose personal medical information was used.²⁷²

However, the federal government and at least one state, California, have taken steps to limit the disclosure of information obtained by the employer about his employees. The Privacy Act of 1974²⁷³ limits the federal government's right to maintain information about employees, grants employees access to their records, and limits dissemination of such information to third parties.²⁷⁴ Pursuant to California's Confidentiality of Medical Information Act,²⁷⁵ employers may not disclose an employee's medical records. The California law provides a private right of action affording the aggrieved employee punitive damages up to three thousand dollars as well as compensatory damages.²⁷⁶

Yet another concern of the employee is the right to know test results and the risks to which the employee is being exposed. Presumably, this right is protected by the

263. See *infra* note 310 and accompanying text.

264. *Id.*

265. Rothstein, *supra* note 12, at 1473 n.611.

266. Diamond, *supra* note 12, at 246.

267. *Id.*

268. Minnesota Mining & Mfg. Co., 261 N.L.R.B. 27 (1982).

269. Code of Ethical Conduct for Physicians Providing Occupational Medical Services (1976).

270. *Id.* principle 7.

271. Rules of Agency Practice and Procedure Concerning OSHA Address to Employee Medical Records, 29 C.F.R. § 1913.10 (1980).

272. *Id.*

273. 5 U.S.C. § 552(a) (1976).

274. *Id.*

275. CAL. CIV. CODE § 56 (Deering Supp. 1982).

276. *Id.*

common law which provides that the employer has a duty to disclose any dangers in the workplace to the employee.²⁷⁷ This would include the duty to warn of toxic levels of exposure.²⁷⁸ Legislation at both the federal and state levels also supports the employee's right to know. In 1983 OSHA announced its final Hazard Communication Standard²⁷⁹ which is intended to give some fourteen million workers in the manufacturing sector greater access to information concerning hazards associated with chemicals in the workplace. OSHA also has promulgated an Access to Employee Exposure and Medical Records Rule²⁸⁰ which requires access to information by workers exposed to toxins in the workplace. And finally, nine state legislatures have adopted worker right to know laws²⁸¹ requiring disclosure of toxic substances in the workplace.²⁸² The federal and state right to know laws, however, only provide peripheral comfort to employees because they do not deal directly with genetic testing, do not require employers to disseminate test results to workers,²⁸³ and do not require the employer to provide protection against the toxins identified. Instead, they merely provide disclosure of the existence of such toxins.

A final concern of employees over the use of genetic testing by employers deals with the issue of informed consent. Because the science of genetic testing is at the embryonic stage, a number of employers engage in such a practice for research purposes.²⁸⁴ In these circumstances, the employer should obtain the employee's informed consent to perform such tests. To date, there are no statutes or regulations in the employment area requiring that employers obtain consent from the employee before engaging in genetic testing. The theory of informed consent has its greatest application in the medical field when a patient is advised to undergo an operation and the physician is required to obtain his informed consent to the proceedings.²⁸⁵

The consent which justifies what the law calls "intermeddling" with a person's body is free and informed consent. To be effective the consent must be to the particular contact with the person in question, and if procured "by fraud or mistake as to the essential character" of the conduct it is invalid.²⁸⁶

277. See *infra* notes 297-307 and accompanying text. See also Rothstein, *supra* note 12, at 1472; Note, *Occupational Health Risks and the Worker's Right to Know*, 90 YALE L.J. 1792 (1981).

278. See *infra* notes 297-307 and accompanying text.

279. 48 Fed. Reg. 53,280 (1983). The publication of the standard brought an immediate reaction from unions representing the steel, auto, and chemical industries who challenged the standard's limited application to only the manufacturing industry. Concern was also expressed over provisions in the standard which preempt state and local right to know laws. 13 OCCUP. SAFETY & HEALTH REP. (BNA) 691 (Dec. 1, 1983).

280. 29 C.F.R. § 1910.20 (1981).

281. California, Maine, Massachusetts, Michigan, New York, Oregon, Washington, West Virginia, and Louisiana all have adopted some form of right to know legislation. See Rothstein, *supra* note 12, at 472 n.604 for statutory references. Another five states—Connecticut, Massachusetts, Maine, Ohio, and Wisconsin—also guarantee employees access to medical records. See Diamond, *supra* note 12, at 252 n.139.

282. The duty under these statutes varies greatly from state to state. In Wisconsin, for example, information concerning toxins in the workplace must be given within fifteen days of request. New York requires employers to set up educational and training programs for employees concerning the chemical name of the toxin, its effects, and emergency treatment. Connecticut requires employers to disseminate to employees the chemical names of all hazardous toxins in the workplace within the first month of employment. Diamond, *supra* note 12, at 253. State right to know laws, however, may be limited by the employer's right to protect his trade secrets, such as which chemical is used in the workplace. *Id.*

283. *Id.*

284. REPORT, *supra* note 5, at 36 (Table 6).

285. See C. FRIED, MEDICAL EXPERIMENTATION 19 (1974).

286. *Id.*

A report, prepared under the auspices of the Department of Health, Education and Welfare, addresses the protection of human subjects in experimentation.²⁸⁷ The key recommendation applies to the issue of informed consent. The HEW Report recommends that subjects be given the opportunity to choose whether or not to participate. It also requires that subjects be made privy to certain information such as the research procedure, the purposes of the test, and the risks involved. Subjects should also be given the rights to ask questions and to withdraw at any time.²⁸⁸ The report does not have the force of law, however. Furthermore, there is no requirement under federal, state, or common law that the employer reveal the purposes for a blood test, nor must the employer obtain the employee's permission before taking a blood sample. As stated earlier in this section, the job applicant or employee must either consent to the blood test or suffer the consequences.²⁸⁹

Thus, it appears that an employer is not limited in his right to require employees or job applicants to submit to medical tests, including blood tests which determine genetic background. Furthermore, there is only limited protection for an employee regarding the use of test results. Although legislation has been enacted requiring the employer to disseminate information concerning toxins in the workplace, employers are not required to disseminate test results or to necessarily provide protection against the disclosed toxin. Finally, employers are not required to disclose the purpose of the test to employees nor honor the right to refuse to participate.

IV. EMPLOYER LIABILITY FOR GENETIC TESTING OF EMPLOYEES OR JOB APPLICANTS

It is estimated that the cost of work-related injuries and illness in the United States is close to twenty-three billion dollars annually.²⁹⁰ Despite denials from business that genetic screening is used to minimize the cost of doing business by excluding those who are hypersusceptible,²⁹¹ the practical economics of the business world suggest such an application. Genetic tests theoretically can provide employers with information concerning an employee's or prospective employee's health on the job over the long term. An employee's health is likely to affect his productivity on the job, in particular his absenteeism rate.²⁹² Hypersusceptible employees arguably would take more sick leave and be responsible for a higher turnover rate, necessitating

287. THE NATIONAL COMMISSION FOR THE PROTECTION OF HUMAN SUBJECTS OF BIOMEDICAL AND BEHAVIORAL RESEARCH, THE BELMONT REPORT (April 18, 1979).

288. *Id.* at 5.

289. *See supra* note 260.

290. W.F. GLUECK, PERSONNEL: A DIAGNOSTIC APPROACH 1 (1982).

291. *See Hearings* (Oct. 1981), *supra* note 17, at 262 (testimony of Dr. Bruce W. Karrh). Dr. Karrh stated: The DuPont Co. does not exclude individuals as a substitute for achieving safe exposure levels. If individuals are adversely affected by the chemical exposure in their jobs, DuPont will investigate the situation and then implement appropriate engineering controls, work practices, personal protective equipment or a combination of all these changes as necessary to eliminate the exposure. . . . Thus, at DuPont we do not substitute medical testing and removal for improvements in workplace quality. . . . If we cannot manufacture a product without creating undue risks to our employees, we will not manufacture it at all.

Id.

292. Rothstein, *supra* note 12, at 1445 n.437.

expenditures in hiring and training new workers.²⁹³ The economic benefits of genetic screening for employers could be reflected in fewer workers' compensation claims filed, lower probability of civil litigation, and an overall decrease in insurance costs.²⁹⁴ It has even been suggested that employers might suffer a loss of goodwill by generating adverse publicity for the company if they failed to use genetic screening or monitoring and this failure caused the birth of a defective child because of parental exposure to toxins in the workplace.²⁹⁵ Thus, it is not surprising that a fair number of companies in the OTA study acknowledged an intent to implement genetic testing in the near future.²⁹⁶ Yet great uncertainty surrounding the legal ramifications of implementing such practices haunts the employer. In particular, employers should be concerned with the spectre of liability including common law action for wrongful discharge, negligence, or intentional torts, and violations under the Occupational Safety and Health Act for failure to make the workplace safe. This section will review potential liability for genetic testing under both common law and OSHA from the employer's perspective.

A. Common Law Liability of the Employer

An employer's common law liability for genetic testing may arise under two circumstances: genetic screening and genetic monitoring. Despite the fact that workers' compensation laws have largely preempted the field of employer tort liability for injuries to their employees, an employer may still be found liable for negligence under certain circumstances.²⁹⁷ In general, an employer retains a common law duty to provide employees with a safe and healthy work environment.²⁹⁸ The

293. *Id.*

294. *Id.*; See also Note, *supra* note 12, at 1194-95; Panel Discussion: *The Role of the Knowledge of High Risk Groups in Occupational Health Policies and Practices*, 29 ENVTL. HEALTH PERSP. 143, 148-49 (1978).

295. Rothstein, *supra* note 12, at 1445.

296. Report, *supra* note 5, at 34.

297. Workers' compensation statutes are now in effect in every state. They provide for compensation of employees who prove that their injuries arose out of and in the course of their employment. See generally A. SOMERS & H. SOMERS, WORKERS' COMPENSATION (1954). All workers' compensation statutes provide that "the compensation remedy is exclusive of all other remedies [including those at common law] by the employee or his dependents against the employer and insurance carrier for the same injury, if the injury falls within the coverage formula of the Act." A. LARSON, 2A WORKMEN'S COMPENSATION LAW § 65.10, at 12-4 (1982). The coverage under workers' compensation has been extended to include certain occupational diseases; however, the employer often has difficulty proving job relatedness because most occupational diseases do not manifest themselves until many years later. See Note, *supra* note 12, at 1195. However, if the injury or disease does not fall within the coverage formula of the act, then the employee may avail himself of his common law remedies including a cause of action for negligence or intentional tort. A. LARSON, *supra* note 297, § 65.00, at 12-1. Furthermore, the exclusive remedy rule generally only applies to causes of action for damages; an employee may still seek injunctive or declaratory relief. Rothstein, *supra* note 12, at 1481. Application of such a right is illustrated in a New Jersey case where an employee sought injunctive relief to require his employer to prohibit smoking in certain areas. The court allowed the employee's prayer for injunction stating that he had a right at common law to a healthful work environment. See *Shimp v. N.J. Bell Tel. Co.*, 145 N.J. Super. 516, 368 A.2d 408 (Ch. Div. 1976).

298. See *Industrial Union Dep't v. American Petroleum Inst.*, 448 U.S. 607 (1980); *Kimbler v. Pittsburgh & Lake Erie R.R.*, 331 F.2d 383 (3d Cir. 1964); *Emig v. Erie Lackawanna Ry.*, 350 F. Supp. 986 (E.D. Pa. 1972), *aff'd*, 485 F.2d 679 (3d Cir. 1973). See also *Rickett v. Jones R.R.*, 495 F.2d 185, 188 (5th Cir. 1974); *Foreman v. Dorsey Trailers, Inc.*, 256 Ala. 253, 54 So. 2d 499 (1951) (employer liable for failing to provide well ventilated workplace resulting in lead poisoning); *Brown v. Sharphauser Contracting Co.*, 159 Cal. 89, 112 P. 874 (1910) (employer held liable for negligence in earth cave-in); *Nichols v. Harvey Hubbel, Inc.*, 92 Conn. 611, 103 A. 835 (1918) (employer found liable for negligent design of platform on which plaintiff was asked to work); *Riggs v. Missouri-Kan.-Tex. R.R. Co.*, 211 Kan.

employer has a further duty to identify latent or hidden dangers known to him or discoverable by the exercise of reasonable care²⁹⁹ and to disclose such dangers to his employees.³⁰⁰ Inherent in the above general duties is the employer's duty to warn his employees of known or discoverable dangers of occupational disease.³⁰¹ Furthermore, "[t]he common law imputes to the employer not only a knowledge of the constituents and general characteristics of the substances used in his or her business, but also a scientific understanding of their risks."³⁰²

In applying these duties to the presence of toxins in the workplace, an argument is that the presence of such substances constitutes a breach of the employer's common law duty to maintain a safe workplace—especially for those workers who are hypersusceptible.³⁰³ The existence of such a duty may obligate the employer to take certain steps to remedy the problem, such as transfer of the employee, utilization of personal protective devices, rotation of employees, installation of engineering controls, or even the discontinuation of a product.³⁰⁴ Furthermore, as one author has noted, both the presence of toxic substances and the known hypersusceptibility of certain employees to toxins are hidden risks.³⁰⁵ To meet his common law duty, the employer must then disclose the nature of the toxic substances³⁰⁶ and, when genetic testing achieves a high probative value, must identify those employees who are hypersusceptible through such testing.³⁰⁷

In addition to the general common law duties identified above, the employer has several specific duties to job applicants and employees once he decides to embark on a course of genetic screening or monitoring. These are: 1) a duty to perform any medical proceedings with care; 2) a duty to warn of a serious medical condition; and 3) a duty to warn of the aggravation of an existing medical condition.

795, 800, 508 P.2d 850, 854 (1973); *Farley v. M.M. Cattle Co.*, 529 S.W.2d 751, 754 (Tex. 1975); Occupational Safety & Health Act, 29 U.S.C. § 651-78 (1982); Federal Employer's Liability Act, 45 U.S.C. §§ 51, 54, 56, 60 (1982).

299. See, e.g., *Coffee v. McDonnell Douglas Corp.*, 8 Cal. 3d 551, 503 P.2d 1366, 105 Cal. Rptr. 358 (1972) (although employer has no duty to give employee a preemployment physical, he is liable for negligent performance if he assumes such duty); *Tedford v. Los Angeles Elec. Co.*, 134 Cal. 76, 66 P. 76 (1901) (employer found liable for failure to warn worker of a hidden danger). See also *Union Carbide & Carbon Corp. v. Stapleton*, 237 F.2d 229 (6th Cir. 1956); *Harris v. Tennessee Valley Auth.*, 507 F. Supp. 318 (E.D. Tenn. 1980); *Rio Grande S.R.R. Co. v. Campbell*, 65 Colo. 217, 176 P. 275 (1918) (duty to discover defective tools); *Ft. Smith & W.R.R. v. Holcombe*, 59 Okla. 54, 158 P. 633 (1916) (duty to discover defective tools); *Lemon v. Lonker*, 97 Pa. Super. Ct. 240 (1929) (duty to warn of latent defect in stepladder).

300. See, e.g., *Tedford v. Los Angeles Elec. Co.*, 134 Cal. 76, 66 P. 76 (1901) (employer liable for failure to warn of danger in handling wires); *Hume v. Fort Halifax Power Co.*, 106 Me. 78, 75 A. 300 (1909) (employer found negligent for failure to warn of rockslide risk); *Clayton v. Ainsworth*, 122 N.J.L. 109, 4 A.2d 274 (1939) (employer negligent for failure to warn of coal slide).

301. See Note, *supra* note 277, at 1804 n.69.

302. *Id.* at 1804 n.70.

303. See *Diamond*, *supra* note 12, at 248.

304. See *Hearings* (June 1982), *supra* note 17, at 25 (Table VIII). These alternative actions are all responses to the subcommittee survey of the Fortune 500 companies inquiring what action the employers took once an employee was discovered hypersusceptible.

305. See *Diamond*, *supra* note 12, at 249.

306. The employer currently also has a statutory duty to disclose certain toxic substances to his employees under the Toxic Substances Control Act. See Toxic Substances Control Act, 15 U.S.C. §§ 2601-29 (1976 & Supp. 1985).

307. The question of how far the employer's duty to warn extends becomes complicated when the individual's genetic disorders are of concern to siblings or children who may have acquired the defect. It has been suggested that if the potential harm to such family members is serious, the employer's duty extends to warning the affected family members, even if the employee has not so consented. See *Diamond*, *supra* note 12, at 249.

1. Duty Owed Prospective Employees

Generally, the law ascribes no duty to an employer to ascertain whether prospective employees are physically fit for the employment they seek. However, if the employer assumes such a duty, he is liable if he performs it negligently.³⁰⁸ A recent example is a California case, *James v. United States*.³⁰⁹ In *James*, the plaintiff brought suit against the government, but not the examining physician,³¹⁰ for failing to inform him of the discovery of a suspected tumor in the course of a preemployment physical. James had applied for a position as a marine machinist and was required to take a preemployment physical examination. An abnormality was noted in a routine chest X-ray, and the reviewing radiologist requested further X-rays. Due to clinical error, both the X-ray and the report were inadvertently filed away.³¹¹ The plaintiff was awarded sixty thousand dollars on the theory that he would have benefitted from early treatment following discovery and disclosure of the suspected tumor at the preemployment physical.³¹²

Similar decisions were reached in two earlier cases, *Coffee v. McDonnell Douglas Corp.*³¹³ and *Betesh v. United States*.³¹⁴ In *Coffee*, the negligence of the employer was established when a blood test, taken during a preemployment physical and indicating a serious abnormality, was inadvertently filed and not reviewed by physicians.³¹⁵ In *Betesh*, the employer's negligence was based on the failure to disclose to plaintiff an abnormality duly noted on his record by a physician and which

308. See, e.g., *James v. United States*, 483 F. Supp. 581 (N.D. Cal. 1980) (United States was negligent when, through clerical error, X-ray of prospective employee was not brought to attention of examining physician); *Betesh v. United States*, 400 F. Supp. 238 (D.C. 1974) (same); *Coffee v. McDonnell Douglas Corp.*, 8 Cal. 3d 551, 503 P.2d 1366, 105 Cal. Rptr. 358 (Cal. 1972) (employer found liable for negligent failure to make abnormal results of applicant's blood test available to doctor in preemployment examination). See also *Union Carbide & Carbon Corp. v. Stapleton*, 237 F.2d 229, 232-33 (6th Cir. 1956); *Isgett v. Seaboard Coast Line R.R. Co.*, 332 F. Supp. 1127, 1141 (D.C.S.C. 1971); *Gunston v. United States*, 235 F. Supp. 349, 352 (N.D. Cal. 1964), *aff'd*, 358 F.2d 303, *cert. denied*, 384 U.S. 993 (1966); *McQuigan v. Southern Pac. Co.*, 129 Cal. App. 2d 482, 277 P.2d 444 (Cal. Ct. App. 1954). Such an obligation generally arises from the RESTATEMENT (SECOND) OF TORTS, § 323 (1965) which states in relevant part:

One who undertakes, gratuitously or for consideration, to render services to another which he should recognize as necessary for the protection of the other's person or things, is subject to liability to the other for physical harm resulting from his failure to exercise reasonable care to perform his undertaking, if

(a) his failure to exercise such care increases the risk of such harm, or
(b) the harm is suffered because of the other's reliance upon the undertaking.

Id.

309. 483 F. Supp. 581 (N.D. Cal. 1980).

310. Generally when a prospective or actual employee attempts to bring suit against a physician employed by an employer for the purpose of examining such employees, the courts have held that there is no doctor-patient relationship between the physician and employee. See Annot., 10 A.L.R.3d 1071, 1073 (1966). Furthermore, courts generally agree that the standard of care to which the physician is held is not the same for employees or job applicants as it is for the physician's own patients. See *id.* at 1074; *Hoover v. Williamson*, 236 Md. 250, 203 A.2d 861 (1964); *Beadling v. Sirota*, 41 N.J. 555, 197 A.2d 857 (1964). The courts have disagreed on the extent of the duty which exists. The differing views are: 1) there is merely a duty not to injure; 2) reasonable care is required; and 3) the only duty is to the employer unless the physician takes it upon himself to advise the patient; then he must act reasonably. Annot., *supra* note 310, at 1074.

311. *James v. United States*, 483 F. Supp. 581, 583 (N.D. Cal. 1980).

312. The plaintiff was required to prove by a preponderance of the evidence that the injury for which he sought damages was proximately caused by a duty the employer owed him. *Id.* at 585. The court held that "[e]vidence which shows to a reasonable certainty that negligent delay in diagnosis or treatment increased the need for or lessened the effectiveness of treatment is sufficient to establish proximate cause." *Id.*

313. 105 Cal. Rptr. 358, 503 P.2d 1366 (1972).

314. 400 F. Supp. 238 (D.D.C. 1974).

315. *Coffee v. McDonnell Douglas Corp.*, 105 Cal. Rptr. 385, 365, 503 P.2d 1366, 1373 (1972).

was in fact the reason for denying him the job.³¹⁶ Thus, in general, courts have established the rule that a physician acting as the agent of an employer has the duty to conduct the examination with care and failure to do so renders the employer liable for any injuries regardless of whether the injured party is a current or prospective employee.³¹⁷ Similarly, based upon these decisions, one can assume that if an employer undertakes to ascertain hypersusceptibility of prospective employees through genetic screening, he is under a duty to perform the test with care and to disclose any negative findings to the job applicant.

2. Duty Owed Current Employees

If an employer uses genetic monitoring on his employees to measure the level of exposure to dangerous toxins, he might be subject to a cause of action for negligence if he fails to warn those employees identified as being at increased risk. The employer's liability arises from his duty to warn employees of existing medical conditions³¹⁸ and his duty to warn of any aggravation of an existing condition.³¹⁹

To establish negligence for breach of the duty to warn the employee of an existing medical condition, the employee must first surmount the exclusive remedy rule provided by workers' compensation.³²⁰ The employee must prove that either his injury is not subject to the statute's jurisdiction, or that the negligent medical services were provided for his benefit and not that of the company.

An example of the former theory, that the employee's injury is not subject to the statute's jurisdiction, is *Wojcik v. Aluminum Co. of America*.³²¹ In *Wojcik*, the plaintiff sued his employer for negligently failing to inform him that physical examinations had disclosed he was developing tuberculosis.³²² The court noted that although workers' compensation is the exclusive remedy for injuries of disease contracted pursuant to employment, "the plaintiff does not allege that he sustained any physical injury or disability arising out of or in the course of his employment, or that he contracted any occupational disease in such employment."³²³ Therefore, the plaintiff was not foreclosed from maintaining a common law cause of action for the

316. *Betesh v. United States*, 400 F. Supp. 238, 247 (D.D.C. 1974).

317. *James v. United States*, 483 F. Supp. 581 (N.D. Cal. 1980); *Betesh v. United States*, 400 F. Supp. 238 (D.D.C. 1974); *Coffee v. McDonnell Douglas Corp.*, 503 P.2d 1366, 105 Cal. Rptr. 358 (1972).

318. *Betesh v. United States*, 400 F. Supp. 238 (D.D.C. 1974) (employer held liable for failure to notify employee of tumor found during X-ray examination); *Bednarski v. General Motors Corp.*, 88 Mich. App. 482, 276 N.W.2d 624 (1979) (employer liable for failure to detect or reveal lung cancer during employee's physical examination); *Wojcik v. Aluminum Co. of America*, 183 N.Y.S.2d 351 (1959) (employer liable for failure to notify employee that he had developed tuberculosis). *But see* *Hoesl v. United States*, 451 F. Supp. 1170 (1978), *aff'd*, 629 F.2d 586 (1980) (employer not liable for negligent report of psychiatrist which cost plaintiff his job). *See generally* Annot., 69 A.L.R.2d 1213 (1960).

319. *See, e.g., Riste v. General Electric Co.*, 47 Wash. 2d 680, 289 P.2d 338 (1956) (employer liable for aggravating employee's preexisting medical condition by assigning him arduous work despite knowledge of the condition).

320. *See supra* note 297.

321. 183 N.Y.S.2d 351 (1959). *Accord* *Barrencotto v. Cocker Saw Co.*, 266 N.Y. 139, 194 N.E. 61 (1934) (employer was successful in a negligence action against his employee for dust disease prior to its inclusion under workers' compensation).

322. *Wojcik v. Aluminum Co. of America*, 183 N.Y.S.2d 351, 353 (1959).

323. *Id.* at 354.

employer's negligence. Similarly, in *Bednarski v. General Motors Corp.*,³²⁴ the court found that the estate of the deceased established negligence against the decedent's employer. The court held that an action may be maintained for failure to detect or reveal to the decedent the presence of cancer revealed in X-rays of his lungs, provided such disease neither arose out of or in the course of employment nor was based on the employment relationship.³²⁵ The court found that workers' compensation would not bar employee actions against an employer if the employment relationship was only incidental to the cause of action brought on another basis (in this case, negligence).³²⁶

An example of the latter theory, that the medical examination was conducted for the employee's benefit, is *Betesh v. United States*.³²⁷ In *Betesh*, the plaintiff was refused induction into the Army based on the government doctor's finding of an abnormality in a chest X-ray taken in his preinduction physical examination.³²⁸ Plaintiff incorrectly assumed he had been rejected on the basis of a previous knee injury. When the government doctor recalled plaintiff to determine whether his condition had progressed, the extent of his injury was discovered.³²⁹ Plaintiff argued that the doctors assumed diagnostic and advisory duties for his benefit alone when they recalled him to reevaluate his condition, thereby establishing a doctor-patient relationship with all the requisite duties.³³⁰ An analogous situation is the practice of certain companies in engaging in genetic testing of employees for the employee's benefit.³³¹ Under such circumstances, the *Betesh* case presents a strong argument for finding that the company's doctors perform tests for the employee's benefit, and failure to discover and disclose the results to the participant leads to a cause of action.³³²

Employers may also be held liable in tort for failure to warn employees of the aggravation of an existing condition. In *Riste v. General Electric Co.*,³³³ the employer, pursuant to an industrial medical program, X-rayed and examined employees on a regular basis. The plaintiff's X-rays, taken on two different occasions a year apart, showed active tuberculosis. After each of these examinations, the company notified the plaintiff that nothing serious was evidenced. The company, knowing that he had tuberculosis, assigned him to tasks involving physical exertion

324. 88 Mich. App. 482, 276 N.W.2d 624 (1979).

325. *Id.* at 484, 276 N.W.2d at 626.

326. *Id.*

327. 400 F. Supp. 238 (D.D.C. 1974). Although the case addresses the circumstances of an army inductee required to undergo a physical examination and not an employee, the theory of law applied in this situation is germane to the employment environment.

328. *Id.* at 241.

329. *Id.* at 242.

330. The courts have made it clear that a medical examination undertaken by a doctor at the request of the employer is generally deemed to be for the benefit of the employer. Therefore, no physician-patient relationship is established between the doctor and employee. See Rothstein, *supra* note 12, at 1483; Annot., *supra* note 310, at 1073. When no relationship is established between the doctor and patient under these circumstances, either no duty is owed to the employee or a lesser duty is owed. See Rothstein, *supra* note 12, at 1483.

331. According to the testimony of Dr. Karh, a physician employed by DuPont & Co., DuPont offers to test black employees and black job applicants for the sickle cell trait. Dr. Karh stated that the tests are not used for purposes of employment, job placement, or promotion, and in fact were initiated at the request of black employees. *Hearings* (Oct. 1981), *supra* note 17, at 261.

332. *Betesh v. United States*, 400 F. Supp. 238, 247 (D.D.C. 1974).

333. 47 Wash. 2d 680, 289 P.2d 338 (1955).

which worsened his tuberculosis.³³⁴ Plaintiff sued his employer alleging that the physical exertion entailed in his job aggravated his condition. The Supreme Court of Washington found the employer liable in negligence.³³⁵ Thus, it appears that an employee could sue his employer if the employer allowed him to work with toxins to which the employer knew, through genetic monitoring, the employee was hypersusceptible.³³⁶ However, it is unlikely that an employer would be held liable under such circumstances if the employee's condition could only be ascertained through sophisticated and not generally utilized techniques such as genetic screening and monitoring.³³⁷

If an employer uses genetic monitoring on his employees to measure the level of exposure to dangerous toxins, the employer can be charged with negligence if he fails to warn employees of discovered excess exposure. Thus, utilization of genetic monitoring and a subsequent failure to notify employees of adverse results can give rise to a cause of action for breach of the employer's common law duties to his employees. If, however, the employer fails to warn of the danger of continued employment to certain hypersusceptible employees, but these employees are cognizant of the risk and continue to work with such knowledge, then the employer is relieved of his duty and the employees have assumed the risk of harm.³³⁸

Employer liability may also exist under an intentional tort theory.³³⁹ In virtually all jurisdictions,³⁴⁰ the exclusive remedy rule is waived in the face of proof of intentional acts by an employer to harm his employees.³⁴¹ While such proof may be difficult for the employee to provide, the West Virginia court held that "when death

334. *Id.* at 681, 289 P.2d at 339.

335. *Id.*

336. Of course, the common law defenses—contributory negligence, assumption of risk, and the fellow servant rule—might serve to exculpate the employer from liability for negligence under these circumstances or in other common law actions brought by an employee. See W. PROSSER, *HANDBOOK OF THE LAW OF TORTS* § 80, at 256 (4th ed. 1971).

337. See Rothstein, *supra* note 12, at 1484.

338. See W. PROSSER, *supra* note 336; Rothstein, *supra* note 12, at 1484; Note, *supra* note 12, at 1217. For other suggested causes of action sounding in tort, see Rothstein, *supra* note 12, at 1480-84.

339. See *In re Johns-Manville Asbestosis Cases*, 511 F. Supp. 1229 (N.D. Ill. 1981); *Delamotte v. Unitcast Division of Midland Ross Corp.*, 64 Ohio App. 2d 159, 411 N.E.2d 814 (1978); *Mandolidis v. Elkins Indus., Inc.*, 161 W. Va. 695, 246 S.E.2d 907 (1978). Justification for finding intentional torts outside workers' compensation laws is identified in *Blankenship v. Cincinnati Milacron Chem., Inc.*, 69 Ohio St. 2d 608, 433 N.E.2d 572 (1982) where the court stated:

An intentional tort . . . is clearly not an "injury" arising out of the course of employment. . . . [I]t would be a "perversion of" the Workmen's Compensation Act's purpose to allow employers immunity from intentional torts. Indeed, it would be travesty on the use of the English language to allow someone who intentionally inflicts an injury on another to call the injury a work incident.

Id. at 613, 433 N.E.2d at 576 n.8. However, not all courts recognize a cause of action for an intentional tort because of the exclusive remedy rule under workers' compensation acts. In a recent California case, *Johns-Manville Prods. Corp. v. Superior Court of Contra Costa County*, 27 Cal. 3d 465, 612 P.2d 948 (1980), an employee sued his employer alleging that the employer had known of the asbestos danger to the workers for years and had willfully concealed and intentionally misrepresented the hazard. *Id.* at 469, 612 P.2d at 950. The court denied the worker tort relief for his initial injury because of the workers' compensation act, although it did grant him relief for the allegation that the employer had aggravated his condition by subsequently withholding information. *Id.* For a discussion of this case and workers' compensation coverage for occupational diseases, see Kutchins, *The Most Exclusive Remedy Is No Remedy At All: Workers' Compensation Coverage for Occupational Diseases*, 32 LAB. L.J. 212 (1981).

340. *Contra Johns-Manville Prods. Corp. v. Superior Court of Contra Costa County*, 27 Cal. 3d 465, 612 P.2d 948 (1980).

341. See, e.g., *Austin v. Johns-Manville Sales Corp.*, 508 F. Supp. 313 (D. Me. 1981); *Jacobsen v. S.E. Distributors, Inc.*, 412 So. 2d 995 (La. Ct. App.), *cert. denied*, 415 So. 2d 953 (1982); *Sanford v. Presto Mfg. Co.*, 92 N.M. 746, 594 P.2d 1202 (N.M. Ct. App. 1979). See also Rothstein, *supra* note 12, at 1484.

or injury results from wilful, wanton or reckless misconduct such death or injury is no longer accidental in any meaningful sense of the word, and must be taken as having been inflicted with deliberate intention.’’³⁴² The OTA Report suggests that this ruling supports a cause of action for genetic testing if the following conditions are met: 1) the employer engaged in genetic screening; 2) the tests were proven predictive; 3) the test identified the employee as hypersusceptible; 4) the employer placed the employee in a high risk instead of a low risk environment; and 5) the employee contracted the disease for which he was identified as being at risk.³⁴³

A more definitive intentional tort by an employer is one of fraud. For example, if the employer engaged in genetic screening or monitoring and either hired an employee he knew was hypersusceptible to toxins in the workplace without disclosing the danger to him, or monitored employees without notifying them of any increased danger to them of remaining in the toxic environment, he could be found liable for fraudulent concealment.³⁴⁴ In *Delamotte v. Unitcast Division of Midland Ross Corp.*,³⁴⁵ an employee sued his employer for fraudulent concealment of information concerning hazardous toxins in the work environment. In this case, the employer had taken numerous X-rays of the plaintiff which revealed progressive and advanced silicosis. The employer failed to disclose the results of the X-rays. Consequently, the employee remained in the environment which was causing his health to deteriorate.³⁴⁶ Once again the court held that the remedy under workers’ compensation was not exclusive, and an employee could resort to an intentional tort action for fraud when he had been injured by the employer’s conduct.³⁴⁷ By analogy, this cause of action may serve as a basis for employer liability if an employee could prove that the employer utilized genetic testing, the testing had been proven reliable, the testing identified a particular employee as at risk, and the employer intentionally withheld the results from the employee who subsequently contracted the occupational illness.³⁴⁸

In sum, an employee has numerous possible tort actions against an employer, yet the duties identified and liabilities outlined generally would not arise unless the genetic tests had reached a level of reliability and validity not yet attained. Currently, an employer is less likely to be found liable for *not* conducting genetic testing than he would be for conducting such tests. This is an ironic result because the tests, to the extent that they are reliable, can protect prospective workers from initial exposure to harm and limit current workers from further exposure. The fact that common law theories of liability presently act as a disincentive for employers to engage in genetic testing raises serious concerns.

342. *Mandolidis v. Elkins Indus. Inc.*, 161 W. Va. 695, 705, 246 S.E.2d 907, 914 (1978).

343. See REPORT, *supra* note 5, at 114.

344. See *Delamotte v. Unitcast Div. of Midland Ross Corp.*, 64 Ohio App. 2d 159, 411 N.E.2d 814 (1978). *Accord* *In re Johns-Manville Asbestosis Cases*, 511 F. Supp. 1229 (N.D. Ill. 1981) (employee allowed to recover for employer’s fraudulent concealment of hazardous working conditions); *Johns-Manville Prods. Corp. v. Superior Court of Contra Costa County*, 27 Cal. 3d 465, 612 P.2d 948 (1980) (recovery by employee for fraudulent concealment of his cancer). See also Rothstein, *supra* note 12, at 1485.

345. 64 Ohio App. 2d 159, 411 N.E.2d 814 (1978).

346. *Id.* at 160, 411 N.E.2d at 815.

347. *Id.* at 162, 411 N.E.2d at 816.

348. See REPORT, *supra* note 5, at 114.

B. Employer Liability Under OSHA

Statutory law is no clearer than the common law in delineating an employer's obligations to his employees for genetic testing. Statutory liability for genetic testing of employees arises not only under Title VII and the Rehabilitation Act, but also under the Occupational Safety and Health Act.³⁴⁹ There are no provisions in OSHA specifically recommending or prohibiting the utilization of genetic screening or monitoring, yet because the Act so directly impacts on an employee's health, OSHA seems an appropriate focus for such practices.

Congress enacted OSHA "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources."³⁵⁰ In contrast to Title VII and the Rehabilitation Act, the thrust of OSHA is on minimum standards of safety rather than job preservation. Furthermore, OSHA does not create a private right of action.³⁵¹ Indeed, the Supreme Court has stated that wage guarantees required of one industry by OSHA³⁵² pursuant to its regulatory power were beyond its jurisdiction. The Court stated that OSHA in no way authorizes the agency "to repair general unfairness to employees that is unrelated to achievement of health and safety goals."³⁵³

OSHA places the primary onus for occupational safety and health on the employer by requiring that the employer "furnish for each of his employees³⁵⁴ employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees."³⁵⁵ This mandate to the employer is known as the general duty clause³⁵⁶ and is sufficiently broad so as to encompass an obligation by an employer to engage in genetic monitoring if such a practice would enable the employer to better gauge the safety environment and reduce hazardous levels once recognized.

A second duty which an employer has under OSHA is to comply with all occupational safety and health standards promulgated by the Secretary of Labor³⁵⁷ for

349. 29 U.S.C. §§ 651-78 (1976 & Supp. 1979) [hereinafter cited as OSHA]. Pursuant to section 20 of OSHA, the Secretary of HEW is authorized to conduct studies and research for developing safety and health standards. The National Institute for Occupational Safety and Health (NIOSH) was created for this purpose. However, although NIOSH conducts tests and does research, only OSHA has the authority to promulgate and enforce standards under the Act. M. ROTHSTEIN, *OCCUPATIONAL SAFETY AND HEALTH LAW* 50 (2d ed. 1983). See also Rothstein, *supra* note 12, at 1435.

350. 29 U.S.C. § 651(b) (1976 & Supp. 1979).

351. See Rothstein, *supra* note 12, at 1433.

352. In 1978 OSHA issued a Cotton Dust Standard which specified that employers provide respirators to employees. See 29 C.F.R. §§ 1910-1043(f) (1980). Representatives of the cotton industry brought suit challenging the validity of the Cotton Dust Standard and the validity of the requirement pursuant to the Standard that employees unable to wear respirators be transferred to a more dust-free position, if available, with "no loss of earnings or other employment rights or benefits as a result of the transfer." 29 C.F.R. §§ 1910-1043(f)(2)(v) (1980). See *American Textile Mfr. Inst., Inc. v. Donovan*, 452 U.S. 490 (1981).

353. *American Textile Mfr. Inst., Inc. v. Donovan*, 452 U.S. 490, 540 (1981).

354. The regulations to OSHA define an employee to include job applicants. See 29 C.F.R. § 1977.5(b) (1982). See also Rothstein, *supra* note 12, at 1434.

355. 29 U.S.C. § 654(a)(1) (1976 & Supp. 1979).

356. *Id.*

357. Section 7(a) of OSHA charges the Secretary of Labor with the responsibility of promulgating occupational safety and health standards. 29 U.S.C. § 655(a) (1976 & Supp. 1979). Section 3(8) explains the nature of the standards to be promulgated. It provides:

Without regard to Chapter 5 of Title 5 or to the other subsections of this section, the Secretary shall, as soon

his industry.³⁵⁸ Thus, the employer's obligation under OSHA is twofold.³⁵⁹ A closer examination of both the extent of the employer's obligation to comply with the standards and the extent of his duties under the general duty clause brings us closer to identifying employer responsibilities for genetic testing under OSHA.

1. Employer Compliance With Standards

The Secretary of Labor is responsible for promulgating occupational and health standards³⁶⁰ dealing with exposure to toxic substances which "most adequately assure, to the extent feasible, on the basis of the best available evidence, that no employee will suffer material impairment of health or functional capacity even if such employee has regular exposure to the hazard dealt with by such standard for the period of his working life."³⁶¹ Read literally, this language suggests that the Secretary of Labor has a responsibility to promulgate standards which protect every worker despite variances in human susceptibility.³⁶² Because workers do vary so greatly in their susceptibility to toxins, "only zero exposure limits could protect *all* employees from the risk of occupational disease."³⁶³ Yet the Supreme Court has made it clear that the Secretary may not require, nor is he obligated to require, an absolutely safe standard of exposure for all workers.³⁶⁴ Limitations on the Secretary's standard-promulgating authority are twofold: standards must be both technologically and economically feasible³⁶⁵ and, based on substantial evidence, must be "reasonably necessary or

as practicable during the period beginning with the effective date of this chapter and ending two years after such date, by rule promulgate as an occupational safety or health standard any national consensus standard, and any established Federal standard, unless he determines that the promulgation of such a standard would not result in improved safety or health for specifically designated employees. In the event of conflict among any such standards, the Secretary shall promulgate the standard which assures the greatest protection of the safety or health of the affected employees.

Id. at § 655(a).

358. OSHA standards are identified by four industrial categories: general industry, construction, maritime and longshoring, and agriculture. *See* 29 C.F.R. §§ 1910-1928 (1983). The standards mandate literal compliance. *See, e.g.,* Sierra Const. Corp., 6 OSHC 1278 (1978) (use of employer's own safety methods will not serve to eliminate compliance with OSHA).

359. The general duty clause was enacted to augment the requirement of compliance with OSHA standards. If OSHA has effected standards to cover an occupational hazard, then the employer's duty is to comply with the standard itself before attempting his own measures to safeguard the hazard under the general duty clause. Citation of an employee under § 5(a)(1) of OSHA, the general duty clause, is thus improper if a specific standard exists. *Brisk v. Waterproofing Co.*, 1 OSHC 1263 (1973).

360. Section 3(8) of OSHA defines this term to mean a standard requiring conditions or the adoption of use of practices, means, methods, operations, or processes "reasonably necessary or appropriate" to provide safe and healthful employment or places of employment. *See* 29 U.S.C. § 652(8) (1976 & Supp. 1981).

361. *Id.* at § 655(b)(5). This section also provides:

Development of standards under this subsection shall be based upon research, demonstrations, experiments, and such other information as may be appropriate. In addition to the attainment of the highest degree of health and safety protection for the employee, other considerations shall be the latest available scientific data in the field of feasibility of the standards, and experience gained under this and other health and safety laws. Whenever practicable, the standard promulgated shall be expressed in terms of objective criteria, and of the performance desired. . . . Prior to adoptions of any such standard, the Secretary must specify the health related need for such standards.

Id. at 655(e).

362. *Report, supra* note 5, at 119.

363. Rothstein, *supra* note 12, at 1426 (emphasis in original).

364. *See Indus. Union Dep't v. Am. Petroleum Inst.*, 448 U.S. 607 (1980); *Report, supra* note 5, at 120-21.

365. *See United States Steelworkers v. Marshall*, 647 F.2d 1189, 1264 (D.C. Cir.), *cert. denied*, 453 U.S. 913

appropriate to provide safe and healthful employment.”³⁶⁶ Thus, OSHA does not require that standards promulgated by the Secretary eradicate work hazards entirely, but only that they eliminate, as far as possible, *significant risk of harm*.³⁶⁷

Thus, if the Secretary promulgated a standard specifically designed to protect the most sensitive workers, it might be challenged as not reasonably necessary or appropriate to provide safe and healthful employment³⁶⁸ or because it is technologically or economically infeasible.³⁶⁹ However, as noted in the OTA Report, the Supreme Court has not addressed the issue of how to measure the significant risk of harm either with respect to individuals (which would invite the use of genetic screening in certain instances) or with respect to the work force in that industry as a whole.³⁷⁰ A suggestion, however, that elimination of significant risk of harm may be achieved by removing hypersusceptible workers through genetic screening from the workplace surely begs the question of the intention underlying OSHA. Identifying those who are hypersusceptible fails to satisfy the mandate of OSHA “to assure so far as possible every working man and woman in the Nation safe and healthful working conditions.”³⁷¹ The goal of OSHA is to clean up the work environment in general, not to eliminate workers from the workplace. It would thus appear that pursuant to the general purpose of the standards promulgated by OSHA and the purpose of the Act itself, an employer would be unwise to engage in genetic testing with the purpose of satisfying his obligations to comply with standards promulgated by OSHA.

Although genetic testing in general will not satisfy the goals of the standards promulgated by OSHA, implementation of genetic testing pursuant to specific standards requiring employers to monitor employee exposure to specific toxins in the workplace may be more acceptable. Congress specifically granted the Secretary authority to promulgate standards which “prescribe the type and frequency of medical examinations or other tests which shall be made available, by the employer or at his cost, to employees exposed to . . . [toxic substances] in order to most effectively

(1980); *Diversified Indus. Div., Indep. Stove Co. v. OSHRC*, 618 F.2d 30, 32 (8th Cir. 1980); *American Iron and Steel Inst. v. OSHA*, 577 F.2d 825, 832 (3d Cir. 1978), *cert. granted*, 448 U.S. 909, *cert. dismissed*, 448 U.S. 917 (1980); *see also* *American Textile Mfr. Ins., Inc. v. Donovan*, 452 U.S. 490, 506-22 (1981) (the Cotton Dust Case). Petitioners representing the cotton industry challenged a standard promulgated by the Secretary limiting permissible exposure levels to cotton dust. Petitioners argued the Secretary had not shown that the proposed standards were economically feasible because he had failed to establish that the cost impact of stricter cotton dust exposure standards bore a reasonable relationship to the project benefits to employees. The Supreme Court rejected this cost-benefit argument as being inconsistent with the language of § 6(b)(5) and held that the term “feasible” means “capable of being done, executed or effected.” *Id.* at 508.

366. *Industrial Union Dep’t v. American Petroleum Inst.*, 448 U.S. 607 (1980) (the Benzene Case). In identifying a causal link between benzene and leukemia, the Secretary had promulgated a standard limiting exposure to the lowest technologically possible level without impairing the viability of the industries regulated. The Secretary had taken the position that no safe exposure level could be determined and thus must, pursuant to § 6(b)(5), set the limit at its lowest level. This standard was challenged by the industry, and the Supreme Court found the standard invalid because the Secretary had not shown on the basis of substantial evidence that the standard “‘was reasonably necessary or appropriate to provide safe and healthful employment’ as specified by § 3(8) of OSHA.” *Id.* at 607.

367. *Id.* *See also* REPORT, *supra* note 5, at 121; Rothstein, *supra* note 12, at 1426.

368. Rothstein, *supra* note 12, at 1427.

369. *Id.*

370. REPORT, *supra* note 5, at 121.

371. 29 U.S.C. § 651(b) (1976 & Supp. 1981).

determine whether the health of such employees is adversely affected by such exposure.”³⁷² Pursuant to this grant, the Secretary has created standards governing exposure to toxic substances, one of which requires employers to monitor lead levels among their employees.³⁷³ Genetic monitoring could identify dangerous levels of lead or other substances identified by regulations (such as polyvinyl chloride or arsenic) and would appear to be within the mandate of the OSHA requirements. Arguably, if genetic testing were sufficiently predictive to identify a group of workers at increased risk, then OSHA might require genetic testing as part of a standard governing a hazardous substance.³⁷⁴

An analogous case is the District of Columbia Circuit Court’s decision in the lead standard case, *United Steelworkers of America v. Marshall*.³⁷⁵ This case upheld the right of OSHA to attempt to prevent the subclinical effects of lead poisoning by the imposition of a lead standard which required a blood-lead level examination, biological monitoring, and medical surveillance of individual workers.³⁷⁶ It can be argued that OSHA should have a similar right to attempt to prevent the ill effects of toxic substances in workers by genetic monitoring.³⁷⁷ If an employer were found to be engaged in genetic monitoring for purposes of complying with OSHA regulations, such testing might better pass judicial scrutiny—unless of course such practices were deemed violative of Title VII. As at least one author has noted, the goal of providing safe and healthful working conditions is often in conflict with the goal of providing equal employment opportunities.³⁷⁸

Although the Secretary has the authority to prescribe medical examinations for the purpose of monitoring employee exposure levels to toxins,³⁷⁹ in only a limited number of standards³⁸⁰ does OSHA specify what measures employers must take based on the results of such examinations.³⁸¹ The few standards which do specify what

372. *Id.* at § 655(b)(7). Under § 6(b)(7) of OSHA, the Secretary has the power to “prescribe the type and frequency of medical examination or other tests to determine the adverse health effects from exposure to toxic substances.” *REPORT*, *supra* note 5, at 121. The existing 21 health standards regulating toxic substances require a variety of medical procedures including preplacement physical examinations and periodic checkups and in some instances physicals when an employee leaves. *Id.* at 121–22.

373. 29 C.F.R. §§ 1910–25 (1982). Other standards require the employer to monitor arsenic and acrylonitrile levels among employees. *Id.* §§ 1910.1018 and 1910.1045 (1982). See Rothstein, *supra* note 12, at 1427. If dangerously high levels are recorded, the employer may be required to take remedial measures such as use of personal protective equipment, shift rotation, medical removal, or similar steps. *Id.*

374. *REPORT*, *supra* note 5, at 121.

375. 647 F.2d 1189 (D.C. Cir. 1980), *cert. denied sub nom.* Lead Indus. Ass’n., Inc. v. Donovan, 453 U.S. 913 (1981) (a labor union and industry challenged the lead standard promulgated by OSHA, and the court held that substantive provisions of the lead standard, including medical removal protection program, multiple physician review program, and rules governing access to medical records fell within the scope of OSHA’s statutory power and were a reasonable exercise of that power).

376. *Id.* at 1189–90.

377. See *REPORT*, *supra* note 5, at 121.

378. Note, *Exclusionary Employment Practices*, *supra* note 29, at 98.

379. See *supra* note 372. OSHA has adopted 21 health standards regulating toxic substances, most of which require a medical history of the exposed worker including consideration of genetic background. See *REPORT*, *supra* note 5, at 122.

380. At least three standards, however, do provide guidance for employers. The polyvinyl chloride exposure standard requires medical removal protection (MRP). See 29 C.F.R. §§ 1910, 1017(K)(5) (1982). The asbestos standards require MRP and rate retention (RR) if a position is available. See 29 C.F.R. §§ 1910, 1001(d)(2)(iv)(c) (1982). The lead standard also provides for both MRP and RR. See 29 C.F.R. §§ 1910, 1025(k) (1982).

381. *REPORT*, *supra* note 5, at 122.

actions employers must take (lead, vinyl chloride, and asbestos standards) identify only two specific remedial measures: medical removal protection (MRP) and rate retention (RR).³⁸² If a standard requires MRP, the employer must remove an employee from the toxic environment until the toxic level in his blood is reduced to the required minimum or below.³⁸³ A standard requiring RR provides that the employer must retain the employee at his current wage level during the MRP period.³⁸⁴ These standards suggest that OSHA has the right to require an employer to retain employees who have been adversely affected by toxins during their employment.

The Supreme Court challenged OSHA's authority to require MRP and RR in *American Textile Manufacturers Inst. v. Donovan*³⁸⁵ (the Cotton Dust Case). Although the Court did not directly address the question of whether OSHA has the right to promulgate MRP and RR provisions, it did find that such requirements could only be imposed on an employer after the Secretary has made a finding that such provisions are necessary "to the achievement of a safe and healthful work environment."³⁸⁶ The Supreme Court struck down the Secretary's RR provision in the Cotton Dust Standard,³⁸⁷ admonishing that "the Act in no way authorizes OSHA to repair general unfairness to employees that is unrelated to achievement of health and safety goals"³⁸⁸ Although the Court did invalidate the RR provisions, it did not state that OSHA did not have the right to promulgate such requirements, but only that they be related to safety and health requirements.³⁸⁹ Indeed, the Court found that the Act's legislative history "demonstrates conclusively that Congress was fully aware that the Act would impose real and substantial costs of compliance on industry, and believed that such costs were part of the cost of doing business."³⁹⁰ Thus, it appears that OSHA has the authority, pursuant to its power to promulgate standards, to require genetic testing by employers to the extent technologically and economically feasible and to implement remedial measures, including RR and MRP if justified as health related, within the work environment for those found hypersusceptible.³⁹¹

382. *Id.*

383. *Id.*

384. *Id.*

385. 452 U.S. 490 (1981).

386. *Id.* at 538; REPORT, *supra* note 5, at 122; Rothstein, *supra* note 12, at 1430.

387. *American Textile Mfr. Inst., Inc. v. Donovan*, 452 U.S. 490, 541 (1981).

388. *Id.* at 540.

389. *Id.* at 541.

390. *Id.* at 514.

391. In a recent case out of the Ninth Circuit, *Phelps Dodge Corp. v. OSHRC*, 725 F.2d 1237 (9th Cir. 1984), an issue similar to that in the Cotton Dust Case was decided. Plaintiffs were contesting that part of the arsenic standard which required employers to compensate employees for their time in taking medical examinations scheduled during nonworking hours. The Ninth Circuit, citing the Cotton Dust Case as precedent, held that such a regulation was appropriate and that the Act fully intended to place "real and substantial costs of compliance" on industry as a cost of doing business. *Id.* at 1240.

2. Employer Compliance With the General Duty Clause³⁹²

There are at least fifty-five thousand chemicals in commercial use.³⁹³ While OSHA has promulgated only twenty-one specific toxic standards,³⁹⁴ other chemicals are potentially covered under the general duty clause. The employer generally has a burden to provide "each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees."³⁹⁵ The general duty clause does not mandate total elimination of all work hazards, but represents an achievable goal. The employer's duty is specifically limited to recognized hazards.³⁹⁶

A recognized hazard is one that is known generally by the industry in question³⁹⁷ or is known to the employer in particular.³⁹⁸ The hazard is then subject to both an objective and a subjective test.³⁹⁹ Because genetic monitoring can identify increases in employer susceptibility to workplace toxins and genetic screening can initially identify those with a low tolerance for certain workplace toxins, an employer may feel justified in engaging in genetic testing pursuant to the general duty clause.⁴⁰⁰ However, because a recognized hazard may be established subjectively, there appears to be a disincentive for employers to voluntarily use genetic tests. Under the subjective test, knowledge is equated with responsibility. An employer then has a duty to eliminate the hazard, alleviate the condition for the hypersusceptible worker, or separate the worker from the hazard.⁴⁰¹ Alternatively, if genetic testing was an accepted industry practice for identifying hazards in the workplace, then an employer might be required to test and possibly be faced with the same possible options: hazard removal, hazard stabilization, or employee removal.

Use of genetic screening is not fulfilling the employer's obligation under OSHA because the employer is focusing on the worker (who, if hypersusceptible, can do nothing to modify his gene structure) as opposed to the workplace (which the employer under OSHA has an obligation to keep clean).⁴⁰² Because the exclusion of

392. 29 U.S.C. § 654(a)(1) (1976 & Supp. 1981).

393. *Hearings* (Oct. 1982), *supra* note 17, at 1 (testimony of Chairman Albert Gore).

394. *REPORT*, *supra* note 5, at 121.

395. 29 U.S.C. § 654(a)(1) (1976 & Supp. 1981).

396. *Id.*

397. *National Realty & Constr. Co., Inc. v. OSHRC*, 489 F.2d 1257 (D.C. Cir. 1973) (a hazard recognized by industry is one which is identifiable by the "common knowledge of safety experts who are familiar with the circumstances of the industry or the activity in question." *Id.* at 1265 n.32. *Accord* *Beaird-Poulan*, 7 OSHC 1225 (1979). *See also* M. ROTHSTEIN, *supra* note 349, at 166.

398. A hazard recognized by an individual employer is one known to the employer through personal knowledge. *Brennan v. OSHRC*, 494 F.2d 460 (8th Cir. 1974). *Accord* *General Electric Co.*, 100 OSHC 2034 (1982). While knowledge of a recognized hazard under § 5(a)(1) refers to knowledge that a condition is hazardous, under § 5(a)(2) employer knowledge refers to knowledge that a condition exists. *See* M. ROTHSTEIN, *supra* note 349, at 107.

399. *See* M. ROTHSTEIN, *supra* note 349, at 166.

400. OSHA does not specifically address the issue of genetic testing, and an employee could not therefore interpret it to mandate such practices. *REPORT*, *supra* note 5, at 120.

401. Since we are addressing the employer's duty under the general duty clause and not under specific standards, it is not easy to identify exactly what his or her duties would be when confronted with recognized hazards. Generally, OSHA would require engineering controls and protective equipment as remedial measures. Removal and rate retention are not mandated by the general duty clause. Because OSHA is not a job security act but a "workplace clean up" act, it does not protect workers from discharge for hypersusceptibility.

402. *Note*, *supra* note 12, at 1209.

hypersusceptible workers does nothing to free the workplace from recognized hazards, it is doubtful that an employer can defend the practice under the guise of the general duty clause. Furthermore, officials of OSHA have gone on record stating that the agency is opposed to the practice of genetic testing.⁴⁰³

A recent case involving the employer's obligations under the general duty clause raises some interesting questions about the employer's right to use genetic testing to remove those workers found to be hypersusceptible from the toxic workplace. In 1979 OSHA issued a citation to the American Cyanamid Company alleging that it had violated the general duty clause by adopting a fetal protection policy. The policy excluded women age sixteen to fifty from production jobs dealing with lead unless the women could prove that they had been sterilized.⁴⁰⁴ The citation was based on the theory that such a program constituted a hazard under the general duty clause and that implementation of such a policy violated the employer's duty to safeguard employees from recognized hazards. The case was heard by an administrative law judge who ruled in the company's favor.⁴⁰⁵ On appeal, a three-person review commission ruled, in a split decision, that the citation be dismissed.⁴⁰⁶ The basis for dismissal was that, although the scope of the general duty clause was intended to protect employees from reduced functional capacity as a result of the work experience, it did not extend to an employment policy "whose physical impact on employees is indirect and derives not from work processes and materials but from social and economic factors outside the workplace."⁴⁰⁷ In dismissing the argument that the fetal protection policy represented a workplace hazard, the review commission stated:

The fetus protection policy . . . is neither a work process nor a work material, and it manifestly cannot alter the physical integrity of employees while they are engaged in work or work-related activities. An employee's decision to undergo sterilization in order to gain or retain employment grows out of economic and social factors which operate primarily outside the workplace. The employer neither controls nor creates these factors as he creates or controls work processes and materials. For these reasons, we conclude that the policy is not a hazard within the meaning of the general duty clause.⁴⁰⁸

The commission's decision suggests that employer utilization of genetic testing would not violate the general duty clause because such a policy, like the fetal protection policy, is neither a work process nor a work material.⁴⁰⁹

403. Bingham, *Letter to the Editor*, N.Y. Times, Mar. 22, 1980, at 20, col. 5 (statement by then Assistant Secretary of Occupational Safety and Health that OSHA does not approve of genetic screening and that such practices run counter to the intent of OSHA).

404. *Oil, Chemical and Atomic Workers Int'l Union v. American Cyanamid*, 9 OSHC 1596, 1597 (1981), *aff'd*, 671 F.2d 643 (D.C. Cir.), *cert. denied*, 459 U.S. 905 (1982).

405. *Id.* at 1597.

406. *Id.* at 1601.

407. *Id.* at 1600.

408. *Id.* Although OSHA did not appeal the decision, the Oil Chemical and Atomic Workers Union did. The United States Court of Appeals for the District of Columbia affirmed the Review Commission's decision. *Oil, Chemical and Atomic Workers Int'l Union v. OSHRC*, 671 F.2d 643 (D.C. Cir.), *cert. denied*, 459 U.S. 905 (1982).

409. Congress conceived of occupational hazards in terms of processes and materials which cause injury or disease by operating directly upon employees as they engage in work or work-related activities. *Oil, Chemical and Atomic Workers Int'l v. American Cyanamid*, 9 OSHC 1596, 1600 (1981) *aff'd*, 671 F.2d 643 (D.C. Cir.), *cert. denied*, 459 U.S. 905 (1982).

There is an important tangential question raised by this case: if, as in the *Cyanamid* case, a standard set by OSHA is underinclusive and recognized to be so,⁴¹⁰ may an employer in the face of technological nonfeasibility (the workplace cannot be made safer) use his own methods to ensure worker safety to effect the goals of OSHA even if it means excluding certain employees (the hypersusceptible) from the workplace? The *Cyanamid* case appears to suggest that an employer may have license to do this. Once again, however, the stumbling block is the context in which the decision was made. In the *Cyanamid* case, the concern was for the fetus, a third party, as in *Wright v. Olin Corp.*⁴¹¹ The issue of third party protection did not arise explicitly in the *Cyanamid* case as it did in the *Wright* case. Arguably, such concern is outside the scope of OSHA. By analogy, however, if the fetal protection policy was not subject to the general duty clause, then neither would a genetic testing policy *unless* it could be proven that such a policy was used in substitution for reasonable safeguarding of the workplace against recognized hazards.

The duty under OSHA is to safeguard *employees* from recognized hazards. If neither the standards set by OSHA nor the technology of the day make it feasible for an employer to achieve this goal and still continue his business using the necessary toxins, arguably he could be allowed to protect workers by genetic selection. In so doing, he would be fulfilling the requirements of OSHA. In light of the *Cyanamid* decision, a legitimate argument exists for utilizing genetic testing to effect the goals of OSHA and the general duty clause in particular when there are no feasible alternatives.

V. LEGAL SUMMARY AND SOCIAL AND ETHICAL CONCERNS

Prior to suggesting a legislative proposal for the regulation of genetic testing, it is important to briefly summarize the legal problems and review the social and ethical problems currently facing the practice of genetic testing. As the preceding survey of the law has suggested, there are serious legal concerns for both the employer and the employee surrounding the practice of genetic testing of workers. Although the government survey found only a handful of companies currently engaged in genetic testing, a greater number expressed interest in commencing such practices in the future.⁴¹² Because of the very real health benefits to be derived from the screening and monitoring of workers, predictions have been made that these practices will be more commonplace in the future.⁴¹³

410. Although OSHA has created standards limiting the levels of lead to which an employee may be exposed, OSHA warned in the preamble to such regulations that they would not protect a fetus from possible overexposure. See 29 U.S.C. §§ 1910, 1025(k) (1981).

411. See *supra* notes 144-53 and accompanying text.

412. Three hundred sixty-six companies out of the five hundred responded. Of these, 59 acknowledged they would possibly use the tests within the next five years. REPORT, *supra* note 5, at 34.

413. See Diamond, *supra* note 12, at 231 n.1 ("Growing acceptance of genetic testing in non-employment situations will likely lead to an increased acceptance of the procedure in employment-related screening, as the procedure is similar.").

Particular employee concerns which have been reviewed in this Article include the utilization of genetic testing for discriminatory purposes⁴¹⁴ and intrusive employer practices which violate employee privacy.⁴¹⁵ Although Title VII, the Rehabilitation Act, and state antidiscriminatory statutes were devised to protect employees from discriminatory employer policies or actions, the use of genetic testing by employers was not one of the concerns envisioned by the drafters of this legislation. Consequently, genetic testing does not satisfactorily fit into the prohibitions of these statutes or fall within the congressional intent underlying these statutes.

Reviewing the analysis of Title VII, denial of employment on the basis of a genetic test may give rise to a cause of action for discrimination based on race or national origin.⁴¹⁶ Because genetic traits vary among ethnic populations, a genetic screening and exclusion practice could have a disparate impact on a protected class. To defend such a policy, an employer would have to prove the business necessity and job relatedness of such practices.⁴¹⁷ It is not clear, however, that avoidance of tort liability, a reduction in workers' compensation claims, or a reduction in the cost of engineering controls would constitute a business necessity. It is also not clear whether an employee's capacity to perform the job without risk of future illness is a job-related characteristic.⁴¹⁸ If an employer were unable to defend a genetic screening program and the program proved to have a disparate impact on a protected class, such a policy would violate Title VII based on these criteria.

The Rehabilitation Act of 1973 is another piece of antidiscriminatory legislation which may be used by an employee subjected to a genetic test and resultant discrimination.⁴¹⁹ Once again, an employee pursuing protection under this Act may succeed. The employer is required to take affirmative action to employ and promote qualified handicapped individuals.⁴²⁰ However, if the employer's job qualification requirements tend to screen out qualified handicapped individuals, then the requirements must be related to the specific job or jobs for which the individual is being considered and must be consistent with business necessity and the safe performance of the job.⁴²¹ The statute offers no help in determining whether a person is handicapped because of his genetic make-up or whether an applicant could be denied employment because of a potential future occupational illness. However, the case law suggests there is a strong argument for finding that genetic make-up is a disability, thus making exclusion of employees on that basis a possible violation of the Act.⁴²²

An employee whose employer did not satisfy the jurisdictional requirements of either Title VII or the Rehabilitation Act might not fare so well under state antidis-

414. *See supra* notes 81-253 and accompanying text.

415. *See supra* notes 254-89 and accompanying text.

416. *See supra* notes 87-122 and accompanying text.

417. *See supra* notes 123-40 and accompanying text.

418. *See supra* notes 137-38 and accompanying text.

419. *See supra* notes 169-224 and accompanying text.

420. 29 U.S.C. §§ 701-94 (1976 & Supp. II 1978).

421. *See supra* notes 203-212 and accompanying text.

422. *See E.E. Black, Ltd. v. Marshall*, 497 F. Supp. 1088 (D. Hawaii 1980); *supra* notes 187-202 and accompanying text.

crimination laws.⁴²³ While some states apply a broad definition of the term "handicapped" including perceived sensitivity to injury in the future,⁴²⁴ others define a handicap more narrowly requiring a substantial physical impairment verified by medical findings and likely to continue throughout the individual's life.⁴²⁵ However, some states limit the use of genetic testing. Three states specifically prohibit exclusion of workers from the workplace on the basis of the sickle cell trait,⁴²⁶ and one state prohibits employee screening on the basis of hereditary traits in general.⁴²⁷

Other concerns of the employee—dissemination of test results, the right to be told of the test results, and the right to be informed of experimental uses of such tests⁴²⁸—are neither addressed by the Constitution nor by common law. In general, absent limited statutory prohibitions,⁴²⁹ no restrictions exist regarding employer requirements of preemployment blood tests, the use of any blood tests for job placement purposes,⁴³⁰ or the dissemination of test results. Furthermore, although the common law physician-patient privilege requires confidentiality of information given by the patient to the physician, this privilege generally does not extend to the company physician and employee or job applicant relationship.⁴³¹ However, pursuant to both right to know statutes⁴³² and the common law duty of employers⁴³³ to employees, a worker does have a right to be told of toxic substances in his workplace. However, these right to know laws do not require that the employer take any preventive measures to protect employees.

Employee concern with genetic testing focuses on the employer's duties to employees under the common law for such practices⁴³⁴ and compliance with OSHA regulations,⁴³⁵ specifically the general duty clause.⁴³⁶ First, an employer may be found liable in tort on a number of different theories relating to genetic testing.⁴³⁷ Under the theory of negligence, an employer can be liable for the breach of various statutory duties owed the employee. These breaches include failing to act upon knowledge gained from genetic testing or failing to obtain correct results due to negligent administration of the tests. Another theory of liability for genetic testing is based on fraud. If an employer knows of an employee's hypersusceptibility to a certain toxin yet allows him to work anyway, the employer can be liable for fraudulently withholding the information.

423. See *supra* notes 225–53 and accompanying text.

424. See *supra* notes 228–36 and accompanying text.

425. See *supra* notes 237–40 and accompanying text.

426. See *supra* notes 241–43 and accompanying text.

427. See *supra* note 244 and accompanying text.

428. See *supra* notes 254–89 and accompanying text.

429. Section 704(a) of Title VII provides that an employer may not discriminate against an employee or job applicant "because he has opposed any practice made an unlawful employment practice by this title." 42 U.S.C. 2001(a) (1976 & Supp. 1979). A blood test used for unlawful purposes is thus arguably prohibited.

430. *Id.*

431. See *supra* note 310 and accompanying text.

432. See *supra* notes 277–83 and accompanying text.

433. See *supra* note 298 and accompanying text.

434. See *supra* notes 297–348 and accompanying text.

435. See *supra* notes 360–91 and accompanying text.

436. See *supra* notes 392–411 and accompanying text.

437. See *supra* notes 297–348 and accompanying text.

Second, OSHA requires an employer "to provide each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm."⁴³⁸ The employer is further required to "comply with occupational safety and health standards promulgated under this Act."⁴³⁹ In promulgating exposure standards, the Supreme Court held in the *Benzene Case* that a standard must be "reasonably necessary or appropriate to remedy a significant risk of material health impairment"⁴⁴⁰ and that OSHA does not require the Secretary to promulgate standards that would assure an absolutely risk-free workplace.⁴⁴¹ Although certain OSHA standards require medical surveillance of employees and others require specific medical tests,⁴⁴² genetic testing is neither mandated nor prohibited. Also, OSHA places responsibility for the safety and health of employees on the employer, but it does not mandate the requirement of a risk-free workplace.⁴⁴³ Further, although OSHA neither sanctions nor condemns the use of genetic testing, it is unclear whether such tests could be used by employers to comply with OSHA regulations concerning testing or the general duty clause. Absent such a sanction, an employer is subject to accusations that testing violates his duty to maintain a clean work environment because he is weeding out susceptible workers instead of the hazard.

The potential liabilities of an employer contemplating the use of genetic testing and the potential abuses of employee rights resulting from this testing are awesome. Because of the importance of such practices, the employer should not be left to his own devices but should be subject to statutory regulation in regard to the use of genetic testing of workers.

Not only are the duties of the employer and the rights of the employee with regard to genetic testing unclear, but similar confusion abounds as to the social and ethical application of such practices. On the one hand, proponents of genetic testing identify validated tests as a legitimate practice furthering the general health surveillance effort and protecting the well-being of employees. As one proponent has stated, there are three legitimate goals of genetic testing: "to protect the worker; to support the regulatory process that's required by the Occupational Safety and Health Act; and to reduce the employer's liability."⁴⁴⁴ Another proponent of genetic testing suggests that validated genetic screening should be used pursuant to a cost-benefit analysis:

[T]he degree of control that would have to be achieved may be unattainable by available engineering measures or be prohibitively costly. If the costs are excessive and impinge seriously on the financial health of the enterprise, the benefit to a few could be outweighed by the harm to the majority of workers and it might be better to place hypersusceptible workers elsewhere.⁴⁴⁵

438. 29 U.S.C. § 654(a)(1) (1976 & Supp. 1979).

439. *Id.* § 654(a)(2).

440. *Industrial Union Dep't v. American Petroleum Inst.*, 448 U.S. 607, 639 (1980).

441. *Id.*

442. *See supra* notes 373-74 and accompanying text.

443. *Industrial Union Dep't v. American Petroleum Inst.*, 448 U.S. 607 (1980).

444. *Hearings* (Oct. 1981), *supra* note 17, at 142 (testimony of Dr. G. Omenn).

445. *Id.* at 9 (testimony of Dr. Ernest E. Dixon).

Yet another proponent of genetic screening believes that the health protection potential of the process overrides possible discriminatory effects:

[S]creening procedures for hypersusceptible workers are interpreted by some as contrary to the requirements for equal employment opportunity and nondiscrimination, and used against the interests of workers. I believe that there are two competing social priorities in this case—the protection of the health and safety versus equal opportunity employment. In my opinion, prudence would dictate that safety and health concerns take priority.⁴⁴⁶

The major concern of opponents to genetic testing is that tests will be used as a substitute for improving the workplace.⁴⁴⁷ The opponents argue that genetic screening shifts the responsibility from the shoulders of the employer to those of the worker.⁴⁴⁸ Further concern is voiced that such practices are discriminatory because of the occurrence of particular genetic traits among particular subcategories of workers. One opponent argues that exposure levels should protect even the most susceptible workers and expressed concern that genetic screening would transfer responsibility “to the genetics of the worker, thus deflecting the attention that might be paid to the employer’s ability or unwillingness to make the workplace safe for all those who trust that their health will be protected on the job.”⁴⁴⁹ Another opponent is concerned that such testing could be used to discriminate:

The day is rapidly approaching when possessing a piece of a subject’s skin would provide an unscrupulous individual with far more detailed information about that subject than could be obtained from a fingerprint and a high quality photograph. If we know enough about a person’s genetic profile, we could exclude him or her from almost any job.⁴⁵⁰

The strongest opposition to genetic testing during the government’s hearings was raised by Mr. Samuels, the director of Health, Safety and the Environment of the AFL-CIO. He stated:

Genetic screening has a potential for unjust application and shortsighted social policy. The probability of overreacting that would unfairly reduce employment opportunities for thousands—perhaps millions—of men and women is established by past performance. Normal “marketplace” corporate policies would discard human beings (correctly or incorrectly from a biological perspective) on a scrap heap for the impoverished. . . . Can we and should we create a race of “susceptibles” consciously sacrificed on the alter of the “greatest good for the greatest number”? . . . Who would employ these “susceptibles,” who would protect their dignity and place in the community? Here is the stuff by which war and revolution have been made and by which human progress has been destroyed. . . . Yet, reliable genetic screening should be done—on one condition: Industrial genetic screening should only take place in a society that has created a system of screening within neutral community structures that protect the individual and his family during the counseling process. It must not take place in the coercive milieu of the typical industrial setting. Acceptable patient-physician relationships cannot usually be developed

446. Mastromatteo, *On the Concept of Threshold*, 42 AM. INDUS. HYGIENE A.J. 763, 768 (1981).

447. See *supra* notes 22–25 and accompanying text.

448. *Id.*

449. *Hearings* (June 1982), *supra* note 17, at 51 (testimony of Dr. K. Miller).

450. *Hearings* (Oct. 1982), *supra* note 17, at 68 (testimony of Dr. H. Sloan).

and maintained in a setting in which confidentiality and trust between doctor and the worker is secondary to interests of the corporation.⁴⁵¹

Ethical issues concerning the use of genetic testing in the workplace were identified during the congressional hearings by Dr. Murray, an associate for social and behavioral studies.⁴⁵² Dr. Murray noted that the ethical questions are obscured by the fact that the testing's focal point is a person's genes which are fixed, unchangable, and unchosen.⁴⁵³ The issue is confused further because genes are inherited along racial or ethnic lines thereby raising the spectre of racial discrimination.⁴⁵⁴ As Dr. Murray stated in the hearings:

The lesson of this is not, I think, that genetic testing is therefore undemocratic or morally wrong. I can imagine circumstances where it would be politically irresponsible and morally corrupt not to act on our knowledge of genetic differences. But facts about genetic make-ups and predispositions are just that—facts—and we would be fools to ignore them.⁴⁵⁵

Dr. Murray identified four possible uses of genetic testing in the workplace, only the last of which he sees as creating serious ethical issues: clinical diagnosis, research, information gathering, and exclusion.⁴⁵⁶ Regarding this last use of genetic testing, Dr. Murray expressed concern that it is "not obvious that exclusion from jobs is the best social policy or the most moral action."⁴⁵⁷ In confronting the issue of genetic testing in the workplace, Dr. Murray summarized the social and moral choices which society faces as being "how to protect the interest of society and the health of the workers without unduly interfering with personal liberty and while preserving a good measure of social justice."⁴⁵⁸

VI. A STATUTORY PROPOSAL

A. *The Need for Legislation*

Although scientists caution that genetic testing is still in the embryonic stages of research,⁴⁵⁹ it is nevertheless being used today by employers to identify employees at greater risk to toxins.⁴⁶⁰ There is strong evidence that more employers plan to engage in genetic testing in the future.⁴⁶¹ Because of the serious possibility of misuse of the practice⁴⁶² and because certain tests are of significant benefit as indicators of potential

451. *Hearings* (Oct. 1981), *supra* note 17, at 32 (testimony of S. Samuels).

452. *Hearings* (Oct. 1982), *supra* note 17, at 75 (testimony of Thomas Murray); Murray, *supra* note 11, at 5. Dr. Murray suggests that the moral issues involved in genetic testing of workers are more complicated than the simple analysis of autonomy versus paternalism because such a perspective ignores the existence of a power relationship between the employer and his employees. *Id.* For further discussion on the autonomy issue surrounding the right to genetically screen workers from the workplace, see McGarity & Schroeder, *supra* note 12, at 1025-29.

453. *Hearings* (Oct. 1982), *supra* note 17, at 76.

454. *Id.*

455. *Id.*

456. *Id.* For a detailed analysis of these four applications of genetic testing, see Murray, *supra* note 11, at 6-7.

457. Murray, *supra* note 11, at 7.

458. *Id.* at 8.

459. See generally *Hearings* (Oct. 1981), *supra* note 17; Sheridan, *Genetic Screening: Its Promise and Peril*, *supra* note 11.

460. See REPORT, *supra* note 5, at 34.

461. *Id.*

462. Z. HARSANYI & R. HUTTON, *supra* note 4, at 118. See also *Hearings* (June 1982), *supra* note 17, at 107.

serious illness to employees exposed to toxins in the workplace,⁴⁶³ this author recommends that Congress act now to regulate the practice. If employers are allowed to experiment with genetic tests regardless of their validity without legislative guidelines, lawsuits will undoubtedly be the result. Lawsuits may arise pursuant to Title VII, the Rehabilitation Act, OSHA, or state antidiscrimination laws. A number of confusing legal issues could arise under Title VII including the interpretation of genetic make-up as a bfoq⁴⁶⁴ and the use of business necessity as a defense to refusal to hire.⁴⁶⁵ Under the Rehabilitation Act, the issue would focus on the nature of genetic make-up; does it represent a handicap?⁴⁶⁶ Under OSHA, a further issue would arise: is genetic testing appropriate in light of the Act's avowed purpose—to maintain a safe workplace for all men and women?⁴⁶⁷ At the state level, a myriad of conflicting decisions would arise concerning the definition of genetic make-up as a handicap.⁴⁶⁸ Allowing states to decide the issue separately would prove problematic by affecting an employer's decision concerning the location of his business. Conversely, state regulation might affect a worker's decision concerning where he will live and work.

In general, our current legal framework appears ill equipped to address the issues raised by genetic testing in the employment setting. The practice of genetic testing falls under the jurisdiction of three federal statutes whose goals are contradictory. It is very possible that genetic testing would be prohibited under Title VII because an employer is unable to defend practices which clearly have unequal racial results and because cost savings are not considered a rationale for the business necessity defense. However, it is possible that OSHA would encourage such practices in the interest of enhancing employee health if there were no alternative means available to better effectuate improved safety in the workplace. Similarly, the Rehabilitation Act, state laws, and the legal definition of handicapped individual, might protect the employee's job on the basis that he was currently able to perform the work. Thus, the Rehabilitation Act would protect an employee's right to a job in a manner inconsistent with OSHA. Furthermore, under common law the employer has no duty to inform current or prospective employees of test results, to limit dissemination of the test results, or to maintain that the tests are voluntary. Because of the confusion the use of genetic tests would currently generate, and because of the lack of clear statutory or common law protections for the employee surrounding these tests, Congress should define the rights, obligations, and liabilities of the parties engaged in genetic testing.

In designing such legislation, careful thought should be given to the issues and concerns faced by the employee and the employer under our current legal framework. First, legislation for genetic testing should be responsive to employee concerns of discrimination and confidentiality and to employer concerns of common law and statutory liability to the employee. Second, legislation should be sensitive to the goals sought by the use of genetic testing in the workplace.

463. See *supra* notes 66–71 and accompanying text.

464. See *supra* notes 101–112 and accompanying text.

465. See *supra* notes 127–43 and accompanying text.

466. See *supra* notes 181–86 and accompanying text.

467. See *supra* notes 349–411 and accompanying text.

468. See *supra* notes 225–53 and accompanying text.

These goals have been aptly identified by a witness at the government's hearings: clinical diagnosis, research, information, and exclusion.⁴⁶⁹ First, the tests could be used to clinically diagnose toxic illness in a worker; second, tests could be used in research to identify causal relations between a worker's genetic make-up and reactions to toxins in the workplace; third, the information gleaned from genetic tests could be used to inform workers of any links between their genetic make-up and certain work environments; and fourth, the tests could be used to exclude certain workers from toxic work environments to which they exhibited a hypersusceptibility.⁴⁷⁰ The first three uses clearly serve to benefit society by expanding our knowledge of genetic anomalies and their relation to the workplace. Through this knowledge, lives can be saved. However, the fourth application—exclusion—raises serious ethical and moral questions concerning employer and employee rights and requires careful regulation by the government to forestall abuse by employers.

It is proposed that the overall goal of legislation should be to validate the utilization of genetic testing for purposes of reducing worker illness or death from occupational disease. Regulation should specify those tests which have probative value for identified occupational disease hazards. The legislation should regulate closely the uses of genetic tests and address the responsibilities of the employer to his employee in connection with the test results. The following proposed statute, while not comprehensive,⁴⁷¹ is intended to provide a starting point for the drafting of legislation to regulate the use of genetic testing in the workplace.

B. A Brief Summary of the Act

The proposed legislation is suggested to effect the validation and regulation of genetic tests in the workplace for the specific purposes of clinical diagnosis, research, information, and limited exclusion of workers. To carry out these purposes, the Act will create a Commission on Genetic Testing comprised of three members: one from industry, one from labor, and one from the scientific community. The Commission shall have four functions: 1) the promulgation of rules and regulations surrounding the practice of genetic testing in the workplace; 2) the review of complaints in regard to discriminatory application of the tests or other violations of this Act; 3) the distribution of grants for the study of genetic tests; and 4) the review of genetic tests proposed by industry and the submission of selective tests to the National Institute of Occupational Safety and Health (NIOSH) for approval.

NIOSH has the responsibility of determining the validity of all tests as probative of certain occupational disease hazards and to either approve the test for use in appropriate industries, disapprove the test, or hold the test for further study. Approved tests which are appropriate to an employer's industry may be used by employers for genetic screening and must be used for genetic monitoring purposes. If through

469. See *Hearings* (Oct. 1982), *supra* note 17, at 76 (testimony of Dr. Thomas Murray). See also Murray, *supra* note 11.

470. See *Hearings* (Oct. 1982), *supra* note 17, at 76 (testimony of Dr. Thomas Murray).

471. The author's concern in drafting this proposed legislation was to identify the major provisions. The majority of the legislation is left to those more familiar with legislative drafting.

genetic screening an employer determines that a prospective employee is hypersusceptible (his tolerance for a given toxin falls below the level identified as safe by NIOSH), an employer may refuse to hire him. If through genetic monitoring an employer determines that an employee has become hypersusceptible, the employer must accommodate that employee by alternative means. Employer options may include, to the extent economically and technologically feasible, protective equipment, rotation, or permanent displacement to a nontoxic job with any necessary retraining. If NIOSH disapproves a genetic test for having no or little probative value, an employer may not use the test for purpose of employment decisions. If NIOSH mandates further study of a genetic test, or if a test has not yet been studied by NIOSH, an employer may use the test. However, an employer may not refuse to hire a prospective employee on the basis of this test and must substantially accommodate a current employee who is determined hypersusceptible.

When utilizing either genetic screening or monitoring, the employer has a duty to inform the employee of the purpose and results of the test. The employer is further required to keep all test results confidential. Sanctions provided are for employer violations of the Act or its regulations and discriminatory application of test results. The Act further establishes an employee private right of action in federal courts.

C. The Proposed Statute

The text of the proposed statute and comments thereto follow.

Section 1

Statement of Findings and Declaration of Purpose and Policy

- (a) This Act may be cited as "the 1985 Act for the Regulation of Genetic Testing in the Workplace."
- (b) Congress finds that:
 - (1) Many toxic substances and harmful chemical agents are in wide use throughout industry in the United States.
 - (2) A significant number of workers suffer disability or death or both from occupational diseases caused by exposure to toxins or chemical agents in the workplace.
 - (3) Exposure to toxins or chemical agents is increasing at a rapid rate as scientific technology provides industry with more toxins and chemicals to enhance production and the discovery of new products.
 - (4) Exposure poses a danger to certain employees and places a substantial burden on the national economy due to losses in production, workdays, earnings, and increased medical expenses and disability payments.
 - (5) The science of genetic engineering is now able to identify an individual's genetic composition on the basis of a blood test.
 - (6) Genetic tests of high probative value have a significant application in the workplace by identifying prospective employees susceptible to toxins through genetic screening and by identifying employee intolerance to present levels of toxins through genetic monitoring.
 - (7) A rational approach to the regulation of genetic testing in the workplace will advance the four goals of the use of such tests: clinical diagnosis, research, information dissemination, and exclusion, while also protecting the interests and rights of employees.

- (c) The purpose and policy of Congress pursuant to this Act and through the exercise of its power to regulate interstate commerce, commerce with foreign nations, and to provide for general welfare, is to promote the use of genetic testing as a means of protecting the health of working men and women, reducing incidence of serious illnesses derived from exposure to toxins in the workplace, and reducing the costs associated with occupational illness for employers, prospective and current employees, and society. This purpose and policy will be effectuated by:
- (1) establishing a Commission on Genetic Testing within the Department of Labor authorized to establish mandatory standards concerning the use of genetic tests;
 - (2) providing for approval of genetic tests by the Commission and the National Institute for Occupational Safety and Health; and
 - (3) defining and proscribing various practices of the employer in the administration and use of genetic tests for the purposes of clinical diagnosis, research, information dissemination, and exclusion of workers on a lawful basis.

Based on the OTA Report, substantial evidence indicates that certain genetic tests have probative value and that genetic testing can be a valuable tool in curtailing occupational illnesses through diagnosis, research, information dissemination, and exclusion. It is deemed advisable and necessary to consider legislation to preempt the misuse of genetic testing and to encourage testing in furtherance of employee health goals.

In light of the avowed purpose of this legislation, amendment of any one of the pieces of legislation already discussed (Title VII, OSHA, the Rehabilitation Act) is not satisfactory. The purpose of Title VII is to protect certain classes of persons from discrimination⁴⁷² and is therefore too narrow in scope to encompass genetic testing. OSHA, pursuant to its regulatory power, could regulate the use of genetic testing; however, OSHA's mandate is not job protection (which would be part of genetic testing legislation) but regulation of work hazards.⁴⁷³ Thus, OSHA would lack jurisdiction over the subject matter. Furthermore, OSHA does not provide either a private cause of action to employees or satisfactory remedies.⁴⁷⁴ The definition of handicapped⁴⁷⁵ under the Rehabilitation Act could be modified to include those who are genetically predisposed to certain toxins, yet once again our interest in regulating the use of genetic testing is much broader than simply protecting the worker in his job. Furthermore, the Act's jurisdiction is limited to those who receive federal funds.⁴⁷⁶ While it is acknowledged that any one of the foregoing acts could be amended in some fashion to encompass genetic testing, this author rejects this approach. The amendment of any of these acts would be unsatisfactory because their orientations and original purposes are not sufficiently comprehensive to deal with the scope of concerns involved with genetic testing. Thus, there is a need for a new and independent piece of legislation.

472. See *supra* note 89.

473. See *supra* notes 349-53 and accompanying text.

474. See *supra* note 351.

475. See *supra* note 173 and accompanying text. See also Sanchez, *supra* note 12 (suggestion that the Rehabilitation Act currently provides for protection and relief of the hypersusceptible).

476. See *supra* note 178 and accompanying text.

Section 2

Definitions

For the purposes of this Act

- (a) "Commission" means the Commission on Genetic Testing established under this chapter or its regional directors acting on its behalf.
- (b) "Employee" means any employee of an employer whose business affects commerce or any applicant for employment.
- (c) "Genetic monitoring" means the routine testing by an employer of employees who regularly work with toxins to detect any changes in genetic make-up of the exposed employee and to determine whether hypersusceptibility has been attained.
- (d) "Genetic screening" means a one time preemployment testing procedure used to identify a job applicant's genetic make-up and to determine his hypersusceptibility to toxins in the workplace.
- (e) "Genetic testing" shall include both genetic monitoring and genetic screening.
- (f) "Hypersusceptibility" refers to those individuals whose tolerance for a given toxin, pursuant to an approved genetic test, falls below the level identified as safe by NIOSH, or as otherwise defined by NIOSH for a given genetic test.
- (g) "Institute" (or "NIOSH") refers to the National Institute for Occupational Safety and Health established pursuant to Chapter 15 of Title 29 of the United States Code entitled Occupational Safety and Health.
- (h) "Secretary" refers to the Secretary of Labor.
- (i) "Toxins" refers to radiation and to poisonous, carcinogenic, mutagenic, teratogenic, or other harmful substances in the workplace to which exposure causes a risk of serious or fatal illness as determined by the Commission pursuant to its regulatory power.

A number of terms in the Act need to be defined clearly in order that an employer understands his responsibilities and an employee recognizes his rights.

The Commission is granted various regulatory, reviewing, and enforcement powers. The duties of the Commission necessitate more authority than the EEOC under Title VII. No comparable body under the Rehabilitation Act or OSHA exists.

The term "employee" has been specifically defined to include job applicants as well as current employees. This definition is critically important because of the practice of genetic screening which is directed solely to prospective employees and not current employees. Also, this specific definition avoids questions of judicial interpretation.⁴⁷⁷

Of equal importance are the definitions of genetic screening and genetic monitoring which are treated separately under the Act and which represent separate utility to both scientists and industry.

It is important to identify those employees who are at a measure of risk to their health which is unacceptable to the industry and society. The term "hypersusceptibility" has been chosen to identify these employees. As outlined in the Act, NIOSH has the responsibility for determining the level of toxicity for each approved genetic test which represents an unacceptable elevation triggering various actions under the Act.

Toxins must also be defined to identify those chemicals or other harmful substances for which NIOSH has approved tests, disapproved tests, or established that determinations are pending.

477. Such a problem of interpretation arose under The National Labor Relations Act and had to be resolved by the Supreme Court. See *New Negro Alliance v. Sanitary Grocery Co.*, 303 U.S. 552 (1938).

Section 3

Establishment of a Commission on Genetic Testing

- (a) There is established a Commission on Genetic Testing within the Department of Labor.
- (b) The Commission shall be composed of three commissioners, appointed by the President of the United States by and with the advice and consent of the Senate, each to serve four-year terms.
- (c) The Commission shall appoint regional directors for the enforcement of this Act.
- (d) There shall be a General Counsel of the Commission appointed by the President by and with the advice and consent of the Senate for a term of four years. The General Counsel shall have responsibility for the conduct of litigation as provided in section 10. The General Counsel shall have other duties as the Commission directs.

As at least one author has noted, if legislation is to be enacted to regulate the use of genetic testing, it is important to establish "a mechanism for rule making to evaluate the state of the art in medical screening and to promulgate necessary regulations."⁴⁷⁸ Although several authors have suggested that genetic testing could be regulated under Title VII,⁴⁷⁹ a serious drawback is the lack of rule making power of its Commission, the EEOC. The powers of the EEOC are limited to furnishing assistance to persons subject to Title VII, attempting to effect conciliation between employer and employee, making technical studies, and intervening in civil actions brought under section 706.⁴⁸⁰ The EEOC lacks the authority, which the Commission under this Act needs, to promulgate regulations concerning the use of genetic tests.

Furthermore, the focus of Title VII is on job preservation and not employee health. While job preservation is indeed a component of this Act, it is only one of its purposes. The other purposes of this Act include the authorization of genetic tests, medical review of and probative value determination of such tests, the encouragement of research of other genetic tests, and the watch-dogging of employer conduct in regard to these tests. The jurisdiction of Title VII or the EEOC simply is not sufficiently broad to encompass the scope of genetic testing.

Similarly, another author has proposed that an amendment to OSHA would be appropriate, thereby granting the Occupational Safety and Health Commission jurisdiction over genetic tests.⁴⁸¹ Whether or not this approach has some merit, this author believes that the subject matter of genetic testing deserves a separate commission designed to address its particular needs. OSHA was designed to oversee the workplace and the safety of workers. To this extent, OSHA satisfactorily meshes with the concern of genetic testing of promoting worker safety. However, the OSHA Commission only has the power to promulgate rules concerning safety measures in the workplace and does not address the issue of preclusion of workers from the workplace or the tangential issue of job preservation. Because OSHA lacks the jurisdiction to

478. Rothstein, *supra* note 12, at 1495-96 n.751.

479. See Rothstein, *supra* note 12; Note, *supra* note 12.

480. Civil Rights Act of 1964 (Title VII), 42 U.S.C. §§ 2000e-e17 (1976 & Supp. 1979). For the limited powers of the EEOC, see § 705 of Title VII.

481. See Sanchez, *supra* note 12, at 201.

deal with these issues, it is recommended that a separate commission be established to specifically address this important employment tool.

Finally, one author has recommended that the Rehabilitation Act be revised to subsume the category of hypersusceptible employees under the definition of handicapped.⁴⁸² The Rehabilitation Act's purpose is to require employers to take affirmative action to hire the handicapped. However, this author again feels the scope of the Rehabilitation Act is too narrow. While the Rehabilitation Act deals with job preservation, Congress did not intend to require employers to hire someone and expose them to a work environment which is harmful simply because they satisfactorily meet the definition of handicapped. Indeed, such a solution would contravene current common law duties of the employer such as not knowingly exposing an employee to a dangerous condition.⁴⁸³ Furthermore, the Rehabilitation Act has no rule making body or power, both of which are essential to properly address the concerns identified by both employers and employees regarding genetic testing.

It is recommended that the Commission be comprised of a member from each of three interest groups: industry, labor, and science. Because of the competing interests of industry (cost savings associated with exclusionary practices) and labor (job preservation and nondiscrimination), each group should have a representative on the Commission to reflect and advocate their disparate interests. The Commission also should have a representative from the scientific community who is in the best position to address the technological nuances of genetic engineering, a rapidly evolving field. The composition of the Commission hopefully will lead to regulations concerning genetic testing which are compatible with the respective concerns of each interest group.

It is recommended that a general counsel be appointed to oversee the legal administration of the Act. This position is patterned after the equivalent position under Title VII.

Section 4

Powers and Duties of the Commission; NIOSH Duties

- (a) The Commission shall have authority to promulgate rules and regulations regarding:
 - (1) factors NIOSH shall consider in determining the probity of a genetic test, including but not limited to validity, reliability, severity of harm the test is designed to detect, predictability, and avoidability of harm;
 - (2) testing procedures, including but not limited to which employees may be subjected to a given genetic test, the contents of consent forms, and the contents of a statement informing the employee he has been diagnosed as hypersusceptible;
 - (3) a standard concerning the use of genetic tests for purposes of screening or monitoring in the workplace.
- (b) Proposed rules and regulations shall be promulgated by:
 - (1) publication in the Federal Register with an allowance of thirty days after publication for comments from interested parties;

482. See Sanchez, *supra* note 12.

483. See *supra* notes 297-348 and accompanying text.

- (2) publication of any amendments to a proposed rule or regulation in the Federal Register, again allowing thirty days for comments;
- (3) publication of the final rule or regulation in the Federal Register.
- (c) Upon publication of a final rule or regulation, the rule shall become effective twenty days after publication.
- (d) During the twenty days between publication of a final rule or regulation and the date it becomes effective, the Secretary shall have authority to revoke the proposed rule or regulation or to issue a delay order to postpone its effective date.
- (e) The Commission shall have authority to submit proposed genetic tests to NIOSH for NIOSH's approval. In determining whether to submit a proposed genetic test to NIOSH, the Commission shall determine whether a substantial number of employees may be protected from a predictable harm if the test is found valid and approved by NIOSH.
- (f) Upon receiving a proposed genetic test, NIOSH shall determine the validity of the test considering such factors as potential harm, predictability of potential harm, reliability, and other factors as promulgated by the Commission in its rules and regulations. NIOSH shall tender one of the following determinations:
 - (1) approval of the proposed test as valid;
 - (2) disapproval of the proposed test as invalid;
 - (3) neither approval nor disapproval of the test, but a determination that the proposed test's validity is uncertain pending further study.
- (g) The Commission shall have the authority to review complaints by an employee alleging a violation by his employer of any applicable rule or regulation under the Act and to attempt to effect a reconciliation pursuant to section 10.
- (h) The Commission itself shall have authority to initiate suit against violators of the Act pursuant to section 10.
- (i) The Commission shall be given budgetary resources by Congress for the purpose of extending grants to parties proposing research in genetic testing, whether such parties be medical research institutes, employers, private foundations, or others.

The ultimate decision to approve a genetic test will fall upon NIOSH. The Commission, however, will provide overall guidelines to aid NIOSH in determining the hypersusceptibility limit for each test. The Commission should recommend that NIOSH approve only those tests which are reasonably predictive of future illness (have a high probative value). The illness or harm for which the screen or monitor tests must be serious and pose a substantial health threat to a genetically grouped classification of workers. To illustrate, although a genetic test has a high probative value for detecting hypersusceptibility to dioxides which causes skin rashes in certain employees, this test is certainly of less consequence and value than a test which detects hypersusceptibility to cancer.⁴⁸⁴

In deciding whether to approve a genetic test, NIOSH should commence its determination with a review of the questions posed by Dr. Murray, a witness at the OTA Hearing:⁴⁸⁵

484. See *Hearings* (June 1982), *supra* note 17, at 99 (testimony of Prof. Rothstein, University of West Virginia College of Law).

485. The following questions and commentaries thereto were supplied by Dr. Murray at the *Hearings* (Oct. 1982), *supra* note 17, at 79-80 and in his article, Murray, *supra* note 11.

1. How many people have the anomaly?

The problem is twofold. If too many people have the anomaly, then validating a test for such an anomaly would affect a great number of people; if too few suffer from the anomaly, the use of the test is less cost effective.

2. What is the relative risk for people with the anomaly for that substance? What is the absolute risk?

Dr. Murray states that "small increases in relative risk do not justify exclusion. Even with large increases in relative risk, if the absolute risk remains low, exclusion is hard to justify."⁴⁸⁶

3. How many people will be misidentified by a screening program? How many false negatives?

This question addresses issues of reliability of the test. It is critical that the Commission submit guidelines to NIOSH which encourage approval of only those tests with high probative value.

4. How many jobs are involved?

Obviously, the more jobs involved the greater the effect on job applicants and employees in that industry.

5. What is the character of the illness or illnesses in question? How serious are they? Are they irreversible? Are they detectable at a preclinical stage? Are they contestable, that is, are their causes likely to be in dispute?

Regarding genetic screening, Dr. Murray comments that "it is easier to justify paternalistic interventions to protect workers from diseases that are fatal, irreversible, and undetectable in early stages even when they might prefer not to be protected."⁴⁸⁷

6. How solid is the evidence linking diseases to combinations of genetic conditions and exposures to specific workplace substances at levels likely to be found in the contemporary workplace?

Clearly a strong scientific basis should be established prior to adoption by the Commission of a genetic test, whether for monitoring or screening purposes.

7. Does the screening program concentrate on groups with a history of discrimination?

8. How does genetic screening compare in its cost effectiveness to other programs that would reduce work-related disease?

The Commission and NIOSH should focus on these issues in promulgating rules and regulations for NIOSH to follow in determining the validity of tests. It is also recommended that the Commission establish guidelines permitting NIOSH to designate tests as having a high probative value or low probative value based on scientific criteria supporting factors of reliability. Only those tests with a high probative value should be considered by NIOSH for approval under sections 5 and 6, and those with

486. *Hearings* (Oct. 1982), *supra* note 17, at 79; Murray, *supra* note 11, at 8.

487. *Hearings* (Oct. 1982), *supra* note 17, at 80; Murray, *supra* note 11, at 8.

only a low probative value should be disapproved under section 7 or placed under section 8 as requiring more investigation.

A fundamental concern regarding genetic tests is that genetic make-up is an insurmountable trait inheritable along racial and ethnic lines. It therefore would be absurd to apply a sickle cell trait test, for example, to an Anglo-American employee or job applicant to satisfy Title VII concerns that tests be administered in a nondiscriminatory fashion. Thus, the Commission has the responsibility of promulgating guidelines and procedures to aid NIOSH in designating which tests will be applied to which category of subjects pursuant to which risk of exposure. The subject-test-risk match-up requires close attention to ensure that allegations of discrimination cannot be justifiably raised. In particular, Dr. Murray emphasized that "[t]here *must* be a sound scientific basis linking anomaly to exposure to disease."⁴⁸⁸

Although the Commission is responsible for overseeing the regulation of genetic testing under the Act, it is appropriate to designate NIOSH as responsible for determining the validity of the tests. Under OSHA, NIOSH has the authority to conduct health hazard evaluations and is authorized to conduct studies and research to develop safety and health standards.⁴⁸⁹ Therefore, based on the guidelines set forth by the Commission, NIOSH is to determine the validity of a given test and either approve it, disapprove it, or identify it as pending.

The Commission would also be responsible for promulgating regulations concerning the nature of the consent forms which employees need to sign and the information which the employer must give to each employee tested, pursuant to section 13. The Commission, not employers, will be responsible for identifying the employees who are to be tested for toxins. This fact protects against the employee concern that an employer may use the tests for a discriminatory purpose.

An incentive structure is needed to encourage groups to engage in genetic testing research. A grant appears to be the most appropriate vehicle for addressing this issue. The incentive on the part of an employer to engage in research is twofold: money is available to encourage such practices; and the results will provide the employer with a test to screen job applicants on the basis of their hypersusceptibility, thereby curtailing expenses connected with occupational illnesses at a later time.

Section 5

Employer Proposal of Genetic Test

- (a) Any employer or other interested party may propose a genetic test to the Commission and the Commission shall decide whether to submit the proposed test and any supporting documentation to NIOSH for approval.
- (b) The Commission may allocate research grants for this purpose pursuant to regulations promulgated to encourage research in genetic testing.

488. *Hearings* (Oct. 1982), *supra* note 17 (emphasis in original).

489. See 20 U.S.C. § 3508(a) (1981). As of 1980, NIOSH was made a part of the Department of Health and Human Services.

Because one of the purposes of genetic testing is to encourage research, it is critical to structure incentives for the employer to engage in research to prevent further incidents of occupational disease. Employers could be encouraged to develop these tests by an incentive structure which would be implemented through research grants for the development of tests with high probative value.

Section 6 NIOSH Approved Tests

- (a) If NIOSH approves a proposed genetic test, NIOSH shall submit a report to the Commissioner detailing how the test should be used, who the test should be used to screen, and what test result is necessary for an employee to be deemed hypersusceptible both for genetic screening and genetic monitoring.
- (b) Upon receiving a report of approval of a genetic test by NIOSH, the Commission shall determine whether the report is sufficient or whether to send it back to NIOSH for further details. Upon Commission approval of the NIOSH report, the Commission shall publish the report in the Federal Register.
- (c) Upon publication of an approved test in the Federal Register:
 - (1) An employer will be required to administer the test to employees pursuant to regulations promulgated by the Commission for the purpose of genetic testing.
 - (2) *In cases of genetic screening*, an employee may be refused employment for being diagnosed as hypersusceptible or for failure to submit to the test. No employee shall be permitted to waive the results of the test when hypersusceptibility is diagnosed. The employee, upon request, must be informed in writing of the results of the test and be informed of his diagnosis of hypersusceptibility pursuant to section 13.
 - (3) *In cases of genetic monitoring*, if any employee is found to be hypersusceptible, the employer shall make every accommodation reasonably available to protect the employee from the toxins in the workplace. The employer, however, has no duty to go beyond any regulations promulgated by OSHA to deal with the particular toxin in the workplace.

If there is no reasonable accommodation which will ensure that the employee will return to an acceptable level of toxicity as determined by NIOSH, the employee shall be given an option. The employee may maintain his present position once he has received counselling regarding the execution of a waiver as to any claims arising out of the aggravation of the particular hypersusceptibility diagnosed. If the employee does not wish to sign such a waiver and no alternative means are available to safeguard the employee, the employer must rotate the employee to another available position in a nontoxic environment. If there is no such position available, then the employer may lay off the employee with all pension and seniority rights preserved until such time as a vacancy which the employee can fulfill becomes available.

The employer must inform the employee in writing of the results of the test and of the diagnosis of hypersusceptibility. The employer also shall inform the employee of the risk of harm which he faces if exposed to the toxins the genetic monitoring is designed to detect. The employer has a further obligation to provide genetic counselling for the hypersusceptible employee pursuant to regulations adopted by the Commission.

Although it may be a financial burden on certain small employers, genetic monitoring should be mandatory. The important health implications to employees far outweigh the cost to the employer. Analogous to the position expressed by the Supreme Court concerning costs under OSHA for safeguarding employees, it is the responsibility of the employer to bear additional costs associated with a healthful work environment.⁴⁹⁰ In contrast, an employer may decide whether to bear the additional cost of genetic screening, which he might be well advised to do in order to avoid the heavier costs associated with hypersusceptibility. Regulations promulgated by the Commission will identify the frequency of the administration of such tests, the procedure, and the bookkeeping surrounding this testing.

If a highly probative test identifies a prospective employee as being hypersusceptible to toxins in the workplace, the employer should not be obligated to hire such an employee. The employer, however, should be required to notify the job applicant of the hypersusceptibility determination and should recommend that he seek counselling. In addition, an employer owes a greater duty to his current employees and must inform any employee of the unacceptable increase in the risk to his health as determined by the genetic monitoring. The employer is obligated to provide genetic counselling to the employee which would include the health implications of a diagnosis of hypersusceptibility. In contrast to job applicants, the employer may not discharge the employee because of his hypersusceptibility. This would be a harsh reward for an employee who, because of his work for an employer, developed an intolerance to a toxin with which he was required to work. Injustice can be prevented by requiring the employer to accommodate the employee, to the extent technologically and economically feasible,⁴⁹¹ through means of protective equipment or by removing the employee either temporarily or permanently from the toxic environment and providing him with alternative employment.⁴⁹² This solution would partially allay the fears expressed by labor that genetic testing would be used in a discriminatory fashion. Although the employer is allowed to discriminate against job applicants, this practice, based on genetic make-up, appears to be no worse than the discrimination employers currently practice based on intelligence, manual dexterity, or other immutable traits employers use to choose among job applicants.

Equity also is served by allowing the worker the choice of continuing in the toxic environment once he has been made aware of the health hazards. This assumption of the risk by the employee,⁴⁹³ pursuant to the execution of a waiver, would relieve the employer from future liability caused by exposure to the toxic substance provided that the employer complies with any OSHA regulations regarding this toxin. Genetic

490. See *American Textile Mfr. Inst., Inc. v. Donovan*, 452 U.S. 490, 514 (1981).

491. The federal courts have used a similar requirement for OSHA standards which must be technologically and economically feasible. See *United States Steelworkers v. Marshall*, 647 F.2d 1189, 1264 (D.C. Cir. 1980), *cert. denied*, 453 U.S. 913 (1981).

492. Similarly, OSHA has implemented several standards which require medical removal and rate retention of employees. See *supra* notes 382-84 and accompanying text. But see *American Textile Mfr. Inst., Inc. v. Donovan*, 452 U.S. 490 (1981), where the Supreme Court held that both MRP and RR could only be imposed on an employer after the Secretary had made a finding that such provisions were necessary "to the achievement of a safe and healthful work environment." *Id.* at 588.

493. Allowing the employee to assume the risk of exposure was also suggested in Note, *supra* note 12, at 1217.

screening and monitoring should not be used by an employer to circumvent his statutory duty to clean up the workplace under OSHA. Therefore, compliance with OSHA by an employer should be emphasized.

Section 7

Genetic Tests Disapproved by NIOSH

- (a) If NIOSH disapproves a genetic test it shall submit a report stating the reasons for disapproval to the Commission.
- (b) Upon reviewing a report of disapproval, the Commission shall publish a notice of disapproval in the Federal Register stating that the test may not be used to make employment decisions. This applies to both genetic screening and genetic monitoring.
- (c) Although an employer may use a disapproved test, no employee shall be required to submit to a disapproved genetic test, nor shall any employee be refused employment or discharged for refusing to submit to a disapproved genetic test or for being diagnosed as hypersusceptible pursuant to a disapproved genetic test.
- (d) An employer may not discriminate on the basis of a disapproved genetic test.
- (e) An employee may submit a complaint to the Commission alleging discrimination on the basis of a disapproved genetic test.

An employer should not base any employment decisions on the results of a disapproved test, and it is a violation of the Act to do so. However, employers should be encouraged to engage in research, and when the test might prove valid under further research, it may be resubmitted to the Commission for approval.

Section 8

NIOSH Approval Pending or Further Study Needed

- (a) If a genetic test has not been approved or disapproved by NIOSH, or it has been submitted for approval and deemed pending based on further study, then the following shall apply:
 - (1) *In cases of genetic screening*, the test may be used only as the last step prior to employment and after the employee already has been deemed hired by the employer.
 - (2) The employee may not be refused employment based on the test results, but must be substantially accommodated by the employer to assure nonexposure to the toxin to which the employee is deemed hypersusceptible.
 - (3) The employee may be denied employment for refusing to submit to the genetic screening.
 - (4) The employee must be informed in writing of his possible hypersusceptibility and be told that the test has not been approved by NIOSH but is pending approval.
 - (5) *In cases of genetic monitoring*, the employee must consent to the test in writing and may not be subject to any employment action for refusing to take a genetic monitoring test under this section.
 - (6) An employee consenting to a genetic monitoring test must be substantially accommodated by the employer to assure nonexposure to the toxin to which the employee is deemed hypersusceptible.
 - (7) An employee consenting to a genetic monitoring test and deemed hypersusceptible must be informed in writing of the susceptibility the test is designed to detect and

the harm to be avoided. The employer also must inform the employee in writing of any health implications and notify him that the test has not been approved by NIOSH but is pending approval.

This section is designed to encourage employers to experiment with genetic tests while protecting the rights of employees from refusals to hire or other employment decisions based on a pending genetic test. Once again, the employer is required to substantially accommodate an employee based on the results of the test.

Section 9 Unlawful Employment Practices

- (a) It shall be an unlawful employment practice for an employer:
 - (1) to use the results of genetic tests for purposes other than those identified under this Act;
 - (2) to fail to comply with the provisions of this Act;
 - (3) to fail to comply with any rules and regulations promulgated pursuant to this Act;
 - (4) to fail to administer a genetic monitoring test as required by the Commission.

Section 10 Investigations by the Commission; Private Right of Action

- (a) The Commission may conduct its own investigations and issue complaints directly against the employer for violation of any section.
- (b) An aggrieved employee may submit a complaint to the Commission alleging a violation of any provisions of this Act or any applicable rules or regulations.
- (c) Whenever a charge is filed by or on behalf of an employee alleging that the employer has violated this Act, the Commission shall serve a notice of charge on such employer within ten days of receipt of such charge. Charges shall be in writing and shall contain such information and be in such form as the Commission requires. Charges shall not be made public by the Commission. Upon receipt and review of a complaint from an aggrieved employee, the Commission may order a regional director to investigate the complaint, or the Commission itself may investigate the complaint if it determines a substantial number of employees are involved in the alleged illegal practice. If after investigation the Commission finds no reasonable cause to believe that the charge is true, it shall dismiss the charge and promptly notify both parties. If after investigation the Commission finds reasonable cause to believe that the charge is true, the Commission or its regional director shall attempt to negotiate a settlement or reconciliation of the complaint. If no settlement or reconciliation is reached, the Commission may issue a right to sue letter to the employee who then may commence suit in federal district court. Alternatively, the Commission may initiate suit if it finds a substantial number of employees are affected by the alleged illegal practice. If the Commission declines to sue or to issue a right to sue letter, then the employee may not sue the employer but may seek review of the Commission's decision in federal district court.
- (d) A charge under this section shall be filed within one hundred eighty days after the alleged unlawful employer act occurred, and notice of charge shall be served on the party against whom such charge is made within ten days thereafter.

This section has been patterned after section 706 of Title VII.⁴⁹⁴ It is important to give the employee a limited private right of action against the employer for violations of the Act. In particular, the employee can avail himself of this right if the employer violates the privacy and consent sections hereto or excludes or transfers an employee without cause. This statute creates a private right of action for the employee because of the possible employer abuse of the tests. The private right of action is limited, however, by requiring that the employee first submit his complaint to the Commission which could decline to issue a right to sue letter. This check on the right of the claimant to redress his wrong in court is justified because it saves time. The Commission is most familiar with the cases which will succeed and can screen out, for the most part, those cases which are not meritorious. The employee does not have a similar right under OSHA and must file in a state court under Title VII before commencing an action in federal court. Therefore, the employee should have a limited private right of action because his complaint will receive a fair and impartial initial review by the Commission. He may, of course, always have this decision reviewed by the federal district court.

Section 11 Civil Remedies

- (a) Upon determination by the court that the employer has engaged in a violation of this Act or the rules and regulations promulgated hereunder as charged in the complaint, the court may enjoin the employer from such practices and may order the appropriate affirmative action. The court's actions may include, but are not limited to, reinstatement or hiring of employees with or without back pay, or any other equitable relief the court considers appropriate.
- (b) The court may further order the recovery of attorneys' fees provided that the party bringing the complaint, whether it be the employer or the Commission, proves a willful, intentional, knowing violation of the Act or any applicable rule or regulation. A rule or regulation that has been properly promulgated and published under this Act shall constitute constructive, irrebuttal knowledge on the part of the employer.

The remedies provided hereunder are similar to those provided under Title VII.⁴⁹⁵ However, Title VII does not specifically provide for payment of attorneys' fees. OSHA, of course, provides no such private relief but only the right to impose monetary penalties on the employer.⁴⁹⁶ Simply exacting penalties from an employer for violations of OSHA has not proven to be a very effective deterrent. In contrast, the remedies provided by Title VII have proved to be much more effective. The key to enforcement of the Act is effective deterrence measures, and the ones identified herein will act to deter employer violations.

494. 42 U.S.C. § 2000(e) (1976 & Supp. 1979). Section 706(a) states in relevant part: "No charge may be filed under this subsection (a) by the person aggrieved before the expiration of sixty days after proceedings have been commenced under the State or local law." *Id.* § 706(a).

495. *Id.* § 706(g).

496. *See* 29 U.S.C. §§ 651-78 (1976 & Supp. 1979).

Section 12

Confidentiality

- (a) Individual results of genetic tests taken by an employer shall be kept confidential subject to the following:
 - (1) The employer has the right to send anonymous results of the tests to NIOSH without obtaining consent of the employee in connection with any rules and regulations promulgated hereunder;
 - (2) The employer has the right to send anonymous results of the tests pursuant to any requirements under OSHA or other similar statutes requiring such information;
 - (3) Written consent by the employee to release the results of the test(s) shall render the results no longer confidential to the extent of the release; and
 - (4) In emergency situations in which grave risk to the health of the employee or his immediate family exists if the results are kept confidential, the test results can be disclosed.
- (b) Results of genetic tests may be disclosed pursuant to the limited disclosures provided in sections 5 and 13.

One of the fundamental concerns of labor spokespersons at the congressional hearings was the issue of confidentiality of test results.⁴⁹⁷ Concern was expressed that employees would be identified by industries as hypersusceptible in general and therefore unemployable.⁴⁹⁸ Thus, limiting the ability of the employer to use the test results and to disclose them to third parties is critical. As discussed earlier in the Article, however, there are certain circumstances under which an employer has a common law duty to disclose certain test results to family members.⁴⁹⁹ Subsection 12(4) preserves that duty in emergency situations.

Section 13

Disclosure Requirements

- (a) The employer is required to disclose in writing the results of any genetic test performed on employees within ten days of the determination of the results. For purposes of this section, the estate or guardian of a deceased or injured employee is designated to receive the results in his stead.
- (b) The employer may disclose the results of genetic tests to third parties provided the employee or his duly appointed representative consents in writing.
- (c) Results must be disclosed to the Commission upon request made pursuant to regulations promulgated by the Commission. The Commission must keep any such results confidential.
- (d) The employer also may disclose results to the limited extent of defending himself against any complaints brought by the Commission or an employee.
- (e) The employer may use the results of the genetic tests for statistical, experimental, or other studies to determine the usefulness or validity of a genetic test. However, the employer may not use the results of tests for the purpose of discriminating against an employee on the basis of his race, national origin, or religion, or for any purposes not identified herein.

497. See *supra* note 254 and accompanying text.

498. See *Hearings* (Oct. 1982), *supra* note 17, at 76 (testimony of Dr. Murray).

499. See *supra* notes 266-67 and accompanying text.

This section satisfies the concern expressed by employees that they have a right to know of test results and the risks to which they are being exposed.⁵⁰⁰ This section sets forth the limited circumstances under which an employer may disclose the results of genetic tests. Section 13(e) is intended to encourage employer experimentation with genetic tests for the purposes of employee health and welfare. Furthermore, this section grants the employee an absolute right to know of the results of any such tests so that he may make informed lifestyle decisions, such as whether to bear children or seek employment in another field.

The Commission should, pursuant to its regulatory power, set forth the extent of the employer's disclosure obligation. Also, the explanation of hypersusceptibility should be given in terms which a lay person can understand.

Section 14 Employer Reporting Requirements

- (a) The employer is required to maintain the results of any genetic tests for a period of three years from the date of the test. The results shall contain the specific information required by the rules and regulations promulgated by the Commission.
- (b) Written genetic test results shall be made available upon written request by the Commission, any of its regional directors, or any past or present employee.
- (c) The Commission may promulgate rules and regulations requiring summaries or statistical results for either a specific genetic test or an overall genetic testing program.

The Commission, acting as a watch-dog over the employer, ensures that the employer maintains proper records of any genetic tests used. Because the results of genetic tests must be disclosed to employees, a provision for maintaining records serves only as a back-up measure and therefore has limited applicability. Genetic monitoring will be conducted on a regular basis, and the results will be disclosed on a regular basis.

Section 15 Mandatory Counselling of Employees

- (a) Pursuant to this Act, the employer must provide genetic counselling to an employee found hypersusceptible. Such counselling shall be provided by an expert in the field of genetic counselling and will be paid for by the employer.

Concern has been expressed that employees will feel inferior because of the knowledge of their hypersusceptibility.⁵⁰¹ Therefore, welfare of the employee necessitates providing him with scientific answers to the concerns raised by his high-risk status.

500. See *supra* notes 277-83 and accompanying text.

501. See *Hearings* (Oct. 1982), *supra* note 17, at 76 (testimony of Dr. Murray).

Section 16 Informed Consent

- (a) The employer or the Commission must obtain the informed consent of the employee to conduct a genetic screening test or further research on genetic tests.
- (b) The employer shall not be required to obtain permission of the employee to conduct genetic monitoring of the employee.
- (c) The informed consent shall be in writing and as prescribed by the Commission.
- (d) No adverse employment actions may be taken by an employer against an employee who refuses to engage in genetic testing for the employer's research purposes.

When the test is voluntary, the consent of the employee must be obtained.⁵⁰² If the employee refuses to consent to a genetic screening test, the employer may refuse to hire him. A screening test has a dual purpose: monitor employee health and curtail employer liability for workers' compensation and disability. Therefore, mandatory tests of all employees is deemed appropriate.

Section 17 Effect of This Act on Other Statutes

- (a) This Act preempts state law to the extent inconsistent.
- (b) Nothing in this Act shall be construed to allow any employer to avoid an applicable OSHA regulation or standard.
- (c) The Rehabilitation Act shall not apply to refusals to hire under section 6 of this Act, provided section 6 has been complied with by the employer. No employer shall be liable for a section 6 refusal to hire provided the employer complied with all applicable rules or regulations.
- (d) Title VII of the Civil Rights Act shall not apply to refusals to hire under section 6 of this Act, provided section 6 has been complied with by the employer. No employer shall be liable for a section 6 refusal to hire provided the employer complied with all applicable rules or regulations.

In order to encourage the use of genetic testing in the workplace by employers, it is essential to assure them that they will not be subject to conflicting sanctions of other statutes such as Title VII or the Rehabilitation Act. The employer must comply with OSHA which focuses on worker safety.

VII. CONCLUSION

The above statutory provisions have attempted to address the various employer and employee concerns with the practice of genetic testing in the workplace. Although no perfect solutions to the issues exist, the statute has tried to balance employer and employee concerns regarding such practices and to propose solutions to the problem or regulation which will further the purposes of genetic testing: diagnosis, research, information, and exclusion.

The importance of safeguarding the legitimate application of genetic testing far outweighs the possibility for abuse. If in fact a means of determining susceptibility

502. See *supra* notes 284-89 and accompanying text.

of certain persons to toxins in the work environment is attainable, these means should be legitimized by statute. Thus, the statute will permit employers to prescreen applicants for their own safety before employment and to test employees during employment to monitor their continued health. In the absence of legislation regulating such practices, employers will continue to be reluctant to engage in genetic testing because of the current legal uncertainty surrounding the practices.

